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DeWitt Nelson

MANAGEMENT OF NATURAL RESOURCES IN CALIFORNIA, 1925-1966

With an Introduction by

George W. Thomson

An Interview Conducted by
Amelia R. Fry

Sponsored by the Forest History Society

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DeWitt Nelson, Director, California
Department of Natural Resources (1960)

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FOREWORD

The following memoir with DeWitt Nelson was made possible by grants from the Setzer Foundation, the Rosecrans Foundation in memory of William S. Rosecrans, and the Forest History Society. It is one of a series of memoirs with leaders in the field of forestry and forest products conducted by the Regional Oral History Office under sponsorship of the Forest History Society.

The Regional Oral History Office was established to tape record autobiographical interviews with persons prominent in the history of the West. The Office is under the administrative supervision of the Director of The Bancroft Library.

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Willa K. Baum, Department Head
Regional Oral History Office

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The following "dedication" by George W. Thomson appeared in the Ames Forester of 1971. It was chosen as the most fitting introduction for this memoir. We are including the entire article and its excellent photographs by permission of the author.

Dedication

DeWitt Nelson

A dedication that is no more than a chronology does no service to the reader and positive harm to the man. Little by little we become aware that all events have an impact on their surroundings and that each one of us is observed and scored as we live out our lives. What one man has done well can provide a working model for all of us who have yet to do. So follows then this poor tracing of the worth-while career of a worth-while man—DeWitt Nelson.

He was born on January 13, 1901, to that peculiarly difficult family position of the middle son. Raised in the not notably forest oriented town of Boone, Iowa, DeWitt, not unlike most of us, had to help in his father's plumbing business, keep up with an older brother, keep ahead of a younger brother, earn pocket money, get educated through high school, stay out of trouble and somehow find who, really, he was and aspire to be something better. The search to be something better was probably just as difficult for Swede at eighteen in the wake of World War I as it is for any of us now. The decision to go to the University of Iowa and the trauma of deciding that was the wrong move and the switch to Forestry at Iowa State was probably just as unnerving as it is for students in 1971.

Gifted with energy and a warm personality, DeWitt participated in much outside work and such extra-curricular activities as Glee Club where his deep and resonant voice found ready demand. Succeeding generations of Iowa State Foresters were told that he sang to improve his voice and certainly his commanding voice and delivery have been used as powerful tools throughout his career. Seniors might note, particularly, that during his last year at Iowa State he served as a $60.00 a month teaching assistant on what was called in those improverished days, the Scrub Faculty.

Upon graduation in the Spring of 1925 he took

a temporary job on the Bitterroot National Forest in Montana in the thoroughly pedestrian job of crew leader in a Blister Rust camp. While in Ames, he had taken the "J.F." exam, a long and demanding examination that for many years was the final test and hurdle before admission to the profession. Word was sent to the Forestry Department that there was a position for Junior Forester Nelson as scaler on the Tahoe National Forest in California if he could report in time to take it. Through the frantic efforts of Professor Jeffers and Swede's fiancee, Miss Sadiebelle Friedley, word was sent to him and he did get the job as log scaler for the old Hobart Mills Company at

Swede (observer-in front) in an old DeHaviland plane on fire patrol. Klamath National Forest, August 1927.

"My finest hour." Tahoe National Forest, California 1925.

Truckee. Thus began a nineteen year tour of duty with the U. S. Forest Service. The lesson to be learned of this is that it is always well to be remembered favorably by one's teachers and to keep up correspondence with one's fiancee.

The Forest Service was much smaller than now, but the need for good men was just as great, so Swede was soon a Ranger on the Truckee District of the Tahoe and after a year and a half was Assistant Supervisor on the Shasta and then in turn Supervisor on the Shasta, the Trinity, the Tahoe and the San Bernadino National Forests. Swede's knowledge of the California forests was and is encyclopedic and his stories of logging, fire and storm deserve to be preserved. His experience with the vast and colorful population that lived in and around the logging economy gave ever greater depth and breadth to his natural affection for people in general and the common man in particular.

It is appropriate to note that there was once a comment on his personnel sheet in those early days that was not whole-heartedly approving. It stated, "DeWitt Nelson is perhaps too people oriented". Fortunately, there was no need to change Swede—it was the profession that changed.

Extraordinary experience with California forestry and a year long assignment as Liaison Officer from the Forest Service with the Civilian Conservation Corps in 1935 and 1936 increased his contacts and deepened his awareness of the problems of rehabilitation of the depression damaged young. It may have been this early exposure to the young that stimulated a life long concern for rehabilitation through the therapy of meaningful out-of-door work. As a testimonial to this concern there stands at Stockton, California the DeWitt Nelson Training Center, newly constructed by the California Youth Authority to assist 1200 young people to become rehabilitated.

With such broad experience, DeWitt was a natural candidate for the position of State Forester of California. Ever-ready to try new tasks, he resigned from the U. S. Forest Service in 1944 and entered the second major phase of his career in the service of the state of California. During the war years on the west coast there were tremendously expanding populations rushing to the war industries, there were hundreds of military camps and reservations, there was the continual worry of fire from natural causes now exaggerated by fires from bombing ranges, bivouac areas and increased population. All this was aggravated by shortages of trained personnel. With the decline of the war effort, there was no abatement of population influx as more and more people moved to California. The demands on the forests for recreation

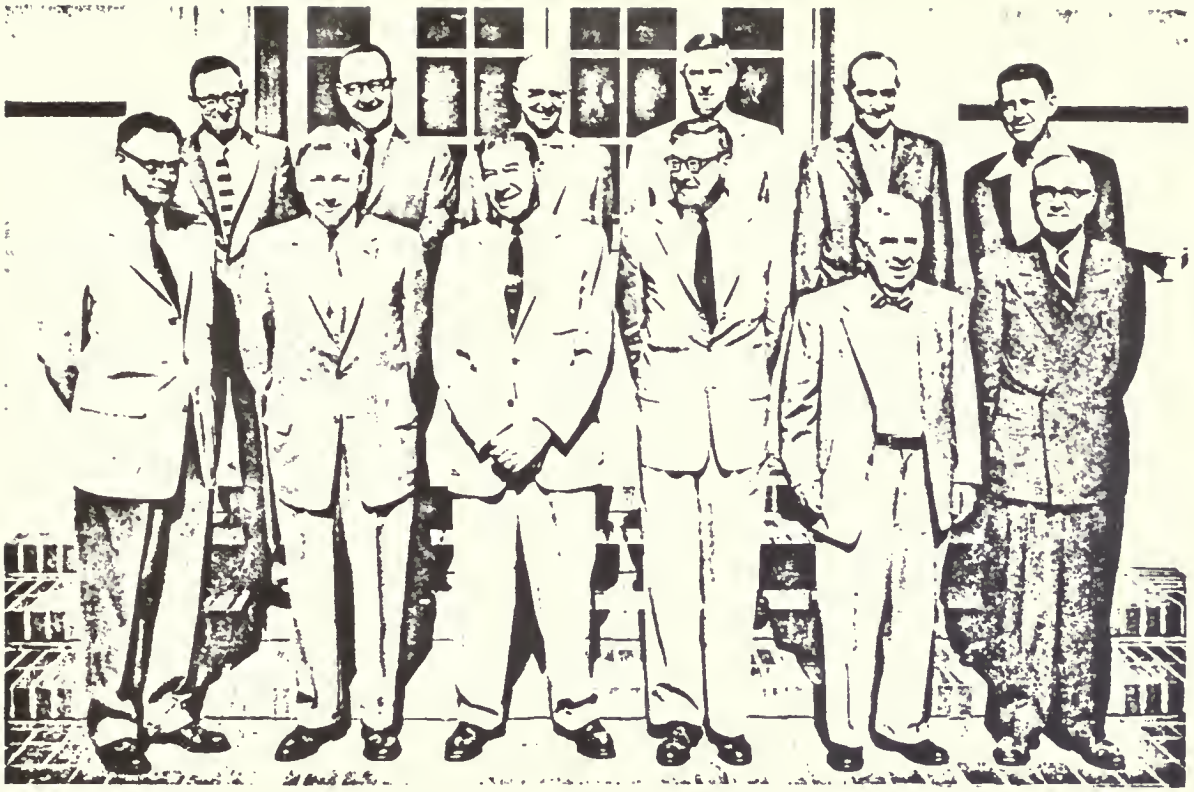
DeWitt Nelson and screen star Thomas Mitchell on a Fire Prevention Campaign.

Swede presiding over S.A.F. meeting in Memphis in 1957. Left—Dean Emeritus Dana (Michigan) and Right —Dean Emeritus Garrett (Yale).

How in the name of super-human work loads could a man also be Vice-Chairman of the California State Water Quality Control Board; be a Council Member of the Society of American Foresters in 1946 and as a consequence of his energetic support be elected to the national Presidency of the S.A.F. in 1956? How could he be a Director of the American Forestry Association; President of the Association of State Foresters; a Member from 1958 to 1966 of the U.S.D.A. Soil and Water Conservation Advisory Committee; a member from 1959 to 1961 of the Advisory Committee to the President's Commission on Outdoor Recreation Resources Review? How could he take the Chairmanship of the 1957 to 1960 California Public Outdoor Recreation Plan Committee; Chairmanship of the American Forestry Association's Land Ownership Study Committee; Chairmanship, 1963 to 1964, of the Western Governors Mining Advisory Council, Chairmanship of the Resources Agency Committee on Delta Recreation Master Planning Committee for the Sacramento River and be Chairman from 1963 to 1965 of the Board of Directors of the California Youth Conservation and Training Program? It is little wonder that he was awarded the Greater Linneaus Medal by the Swedish Royal Academy of Science in 1953 and no wonder at all that he received Iowa State University's Award for Meritorious Service in 1954 and the Chicago Alumni Association Merit Award in 1963. But how could he do all this and serve at winery dedications on week-ends and give countless talks and take numberless dignitaries on trail rides and still raise a son who is already one of the top men in the Timberlands Division of Weyerhaeuser Company?

Always looking for new experience and sensing a change in the administrative structure of California and certainly intrigued by an offer from Iowa State University to serve as Visiting Professor and Lecturer, DeWitt Nelson resigned with tumultuous acclaim from the State of California and the Department of Conservation that he now headed. In 1966 he and his popular wife returned to their beginnings at Ames. During the Winter of 1967 Mr. Nelson gave a series of six lectures on Preservation, Production and Politics. Despite the fact that four of the six lectures were in perfect coincidence with blizzards, sizeable crowds of staff, students and towns people attended this first Iowa State commentary on the environment. The following year he served as Regent's Professor at the University of California at Berkeley for one quarter, and then served for the rest of the year at Oregon State University. It was here as Visiting Lecturer under the Hill Family Foundation spon-

Governor's Park Trip in the High Sierra in 1965. Nelson right, and Governor Brown, second from left.



Top Row: H. J. Vaux; B. E. Allen; J. H. Stone; M. K. Goddard; P. A. Briegleb; C. H. Coulter. Bottom Row: E. F. Heacox; G. A. Garrett, Vice President; DeWitt Nelson, President; Henry Clepper, Executive Secretary; J. S. Illick; S. G. Fontanna.

Society of American Foresters National Council 1956–1957
Berkeley, California, June 24, 1957

sorship that he gave another series of public lectures on the subject of A Changing Resource Base.

A taste for the academic world and increasing need for direction to be given to the new curriculum in Natural Resources for Outdoor Recreation prompted the return of DeWitt Nelson to Iowa State —now with the designation, rank and chores of Professor. It has been during these last three years that the canny sense of Swede Nelson has been most fruitfully added to the classroom. The resulting Professor Nelson and Advisor Nelson and Committeeman Nelson have done a great service to the students who have had increased opportunities to know him and through him the brisk wind that blows outside academic walls.

There are a lot of people that are going to miss Swede Nelson when he goes back to Sacramento this summer. He is steady, he talks sense, he is excellent company. A truly brilliant poker player, he has taken almost twenty-six cents from his friends over the last three years. He has vigorous views of contemporary society, but a youthful willingness to discuss and a guru-like ability to guide that continually fills his office with students. He has brought a personality to us all that has been toughened by hard work and polished by much social contact, but never made abrasive or brittle. His is a philosophy that always looks ahead with optimism in his ability to control his destiny.

But try as one might these things laid out before us do not yet sum up his remarkable recognition by such a wide range of people. In all of the hurly-burly of big government and its association with big politics how has he avoided the stain of scandal ond the niggling rumors of corruption in high places? Why do so many men wish him well?

Through all the many years that I have known of Swede Nelson and the fewer but more treasured years that I have known him as a friend, nothing I have heard or read seems to explain it better than this short paragraph from one of his rather distant subordinates who, by his own admission, had only spoken to his boss twice and shaken his hand once:

> "Well, Sir, I've said enough and from the depths of my heart. Thank you for all that a long and productive life means and may God bless you for all you have done to make the California Division of Forestry what it is today. Thank you for what you have done for me."

And so, Swede, say we all.

George W. Thomson
January 24, 1971

INTERVIEW HISTORY

Sessions April 11, 1966: In the University of California School of Forestry, Berkeley

May 16 and 17, 1966: In Nelson's office in the State Resources Agency, Sacramento

August 10, 1966: In the University of California School of Forestry, Berkeley

August 24, 1966: In the University of California School of Forestry, Berkeley

The Interview

In 1966 Elwood Maunder, Director of the Forest History Society and a long-time friend of DeWitt Nelson's, asked ROHO to produce the memoirs of the California-based leader for the Forest History Society and the University of California's Bancroft Library. Nelson had spent nineteen years with the United States Forest Service and had been in the California State Department of Natural Resources for twenty-two years--beginning in 1944. Almost immediately he had been appointed state forester under Governor Earl Warren, and was promoted to Director of Natural Resources eight years later. Governors Knight and Brown continued the appointment for another eight years. Then in the 1961 state government reorganization, Brown named him Director of the Department of Conservation, a department of a new superagency of State Resources. His record of experience was broad and deep; but, more than that, he had come into state forestry and conservation at the end of one era and was still leading it adroitly in new and expanding responsibilities when the first interview was held in April, 1966.

When we met a month later for the second series of sessions in his office, he had resigned (at age sixty-five), and both his office and his schedule were an exciting clutter of scrolls, congratulations, and awards bestowed on him in one party and ceremony after another. Those May sessions were held in the daytime, between appointments, and into the evening while the janitor vacuumed the outer offices. The lights of the Sacramento Valley stretched out below his glassed-in office atop

Sacramento's tallest building. His wife Sadiebelle, always an important accoutrement in Nelson's life and work, patiently waited in the reception room for the final tape to end. The Berkeley campus provided the setting for the other sessions in a School of Forestry office.

The interviewer was armed with questions from research in past interviews with foresters, and from several advisors, ad hoc and regular (like C. Raymond Clar*). Nelson always went the extra mile in giving a thorough answer, all the while affable and articulate, often beating the interviewer to the question and sometimes bringing in new topics for the record.

The project suffered a hiatus, forced by lack of funds, while Nelson was at Iowa State University in a new career as professor of forestry. Subsequently, in the spring of 1975, when funds reappeared, and when Nelson had returned to Sacramento, the rough manuscript was sent to him and he did a great deal of research to expand and clarify further the basic conversations. He added the story of his "new career" to bring the memoir up to date.

Usually in an interview history one tries to point out the one major contribution an interviewee has made in his field--a sort of focus of his success. In Nelson's case this presents an interesting difficulty because his footprints on the sands of time are many and varied. Perhaps his wide-ranging accomplishments are the result of his own capacity to deal energetically with a number of challenges, combined with an administrative habitat which ideally demanded a multiple approach to factors in decision-making. A Division of Forestry veteran sees "Swede" (Nelson's widely-used nickname) as primarily the one who always handled directly the political tightrope walking, such as that required when dealing with ranchers who wanted more liberal land-burning policies, or fire control jurisdiction questions, or timber cutting regulations. Another named his significant accomplishments on the development of recreation and soil conservation in the Department of Natural Resources.

A leading forestry consultant and professor, Myron Krueger, said that when Swede moved up from the state forester's job, his main feat was the improvement in operations of the formerly innocuous state Forest Practice Act districts: Swede "put teeth into the rules and regulations." He adds that Swede, as a former U.S. Forest Service employee, brought

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*Former Assistant State Forester and author of California Government and Forestry (State of California: 1959 and 1969).

to time sent us leads for research into primary records, gathered photographs and news clippings for use in the transcript, and did much research on his own (many man-days of it later, when he edited the manuscript). In addition, he was a big supporter (along with Horace Albright and Newton Drury) of this office's efforts to begin the Earl Warren Oral History Project. In fact, his interview and Newton Drury's were the first memoirs in the time frame of Warren's tenure as governor; and when we needed an introduction for the two-volume memoir of Drury (former chief of national parks and also California parks under Nelson), Nelson added that task to his lengthening duties for ROHO.* Likewise, Swede had helped the Forest History Society some years before in initiating its field program in California. This year Swede has organized his speeches into eight volumes, which are being deposited, with his papers, in the Forest History Society at Santa Cruz, California.

Director Maunder, recently lamenting how few professionals in any field possess a sense of the importance of the past, added, "But Swede Nelson is certainly one of forestry's historically minded representatives." Not only is forest history much the richer for his good sense, but also the fields of public administration, personnel management, and general resource management and balance.

Amelia R. Fry
Interviewer and Editor

15 September 1976
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*Newton B. Drury, Parks and Redwoods, 1919-1971, Regional Oral History Office, 1972.

DeWitt Nelson.

Biographical Profile.

Born January 13, 1901 in Madrid, Iowa. Spent his youth in Boone, Iowa.

Graduated from Iowa State University with a Bachelor of Science degree in Forestry in 1925. Member Delta Upsilon social fraternity. Alpha Zeta, Phi Kappa Phi, Gamma Sigma Delta and Xi Sigma Pi Honorary Scholastic Societies.

His career has been in the broad field of public administration and education with emphasis on protection, development, management and conservation of natural resources. He served 19 years with the U. S. Forest Service, 9 years as State Forester for California and 13 years as Director of the Departments of Natural Resources and Conservation.During the last five years of his active career he served as Professor of Forestry and Outdoor Recreation at 3 major Universities.

Following is a chronology of the highlights of his 46 years of public service:

1925 - 1944: United States Forest Service:
During this period served as Supervisor of the Trinity, Shasta, Tahoe and San Bernardino National Forests. In mid-30's served one year as member of Adjutant General's Staff as Liaison Officer between all Civilian Conservation Corps Technical Agencies and the U. S. Army for the Ninth Corps Area.

1944 - 1966:State of California:
1944 to 1953 served as State Forester.
1953 appointed Director, Department of Natural Resources by Governor Earl Warren.When Governor Warren was appointed Chief Justice, U. S. Supreme Court Governor Goodwin J. Knight continued the appointment.
1959 reappointed as Director by Governor Edmund G. (Pat) Brown.
1961 with the reorganization of State Agencies was appointed Director, Department of Conservation by Governor Brown.

The Department of Natural Resources included the Divisions of Forestry, Beaches and Parks, Recreation, Mines and Geology, Oil and Gas, Soil Conservation and Small Craft Harbors.

The Department of Conservation was made up of the Divisions of Forestry, Mines and Geology, Oil and Gas and Soil Conservation.

1966 - 1971: Universities:
1966 - 1968 served as Visiting Lecturer at Iowa State University for 4 quarters.Regents Professor, University of California, Berkeley for winter quarter of 1968, and Visiting Professor, Oregon State University for spring quarter of 1968.

1968 - 1971: Professor in charge of a new curriculum titled Resource Development for Outdoor Recreation at Iowa State University.
Retired May 31, 1971 at age 70.

DeWitt Nelson, Director, Department of Conservation (1963)

FAMILY BACKGROUND AND EARLY EDUCATION

Childhood

Fry: I would like to start by learning something about your family, childhood, and early education. You might also tell us how come everyone calls you Swede.

Nelson: Okay. I was born on a farm a few miles north of Madrid, Iowa on January 13, 1901. I didn't stay there long, for my parents moved to Boone, Iowa before the year was out. Father's name was Theodore E. Nelson. His parents came from Malma, Sweden, I would guess in the early 1870s. Grandfather was a tailor. I presume they came to Boone because they had relatives who had preceded them to that area. Mother's maiden name was Emma May Throckmorton. Her ancestors came to Virginia in 1637 with a land grant from the English crown.

I have often wondered, in my later years, how Mother and Dad met. When I knew Mother's parents, they were living in Mulvane, Kansas. From Virginia the Throckmortons went to Pennsylvania, and when Mother was a young girl they went to western Nebraska in a covered wagon and lived in a sod house on the prairie. I remember Mother telling about the prairie fires that often swept across the grassy plains and about the terrible winter blizzards. She did attend Simpson College at Indianola, Iowa for a year or two. Dad had only an eighth grade education. I have always regretted that, as a youth, I failed to learn more about the background of both families.

You asked about my nickname, Swede. My older brother, three years my senior, was given that nickname in high school. When I came along they gave it to me, only they called me Little Swede. He lost it in college, but I never got away from it. I get most of my mail by that name. I doubt that most people know my right name, DeWitt--which suits me, for I never did like it.

Fry: What did your father do?

Nelson: Since both my older brother and I were born on the farm, I presume he initially intended to become a farmer. But for some reason he changed his mind, moved into Boone and went into the plumbing and heating business. He was successful. We were far from rich, but we lived comfortable and happy lives. Dad was a hard worker. He believed in the Protestant ethic of hard work (but I am sure he never heard of it by that name). He prided himself on his honesty and integrity.

Mother was active in the Methodist church. I had a brother eight years younger than I. We kids grew up under a strict Methodist doctrine--no cards, no dancing, no smoking, and no liquor. It didn't hurt us. Everything came along in due course.

Fry: You never did really live on an Iowa farm, then?

Nelson: No, in those days automobiles were not too common. Dad loved horses, and he had a beautiful team of matched blacks--Jim and Topsy. On nice Sundays we would often take a drive into the country to visit friends and relatives. It seemed that as soon as I got old enough to milk, we bought a cow. Since my older brother was a popular athlete in all sports and he had to stay after school to practice, I had the privilege of doing the chores and milking. I remember we got rid of the cow in 1914.

Fry: How and why do you remember that?

Nelson: Well, Mother was afflicted with rheumatism. The winter of 1914-1915 Dad took her to Arizona to see if the change would be helpful. My Uncle Oscar Nelson and family moved in with us kids for that period. Before leaving, Dad told me how to "dry up" the cow, which I did, and we put her out to pasture.

Fry: Did the change help your mother?

Nelson: Only temporarily; she continued to get worse. Dad spent a small fortune on doctors, trips to Hot Springs, and every conceivable possibility to help her. She was wonderful. I know she suffered terribly, but she never complained. For the last twenty years of her life, she was unable to walk. However, she remained quite active in the church. I am sure her belief in God was what carried her through. She died February 11, 1942. She was born on September 15, 1874. Dad was born on December 7, 1870 and died on April 16, 1949.

Fry: Let's get back to the farm.

Nelson: Okay. I spent the summers of 1917 and 1918 working on a farm for a German family near Madrid. Talk about work! We were up by 4:30,

Nelson: milked a string of cows, fed and harnessed the horses, separated the milk, and ate a huge breakfast. After that, the farmer would take the skimmed milk to the hogs. When he called the hogs the neighbors got up, and we were headed into the field. We usually got our evening chores finished by 8:30 or 9:00. I earned $17 per month.

Fry: Was Boone primarily a small agricultural town?

Nelson: Yes and no. Boone was a division point on the Chicago and Northwestern Railroad, with large shops and roundhouse. It had a good railroad payroll. It is also located in the heart of a rich agricultural area as well as being the county seat. When the steam locomotives were replaced by the diesel engines, the shops and roundhouse closed. It was a severe economic blow. Gradually the situation has been corrected with a number of small but clean industries. Boone had a population of about 12,000 when I was growing up, and it has about the same today. It was a swell place to grow up in; small enough and yet big enough. We had river-bottom hardwoods for hikes and picnics. A popular place was the Ledges, which since has become one of the state's finest parks. The schools were good, and we had lots of friends.

Fry: What were some of the activities that you indulged in?

Nelson: That was in the early days of scouting. I was active in that program, most of which was playing in the woods. We were lucky, for Boone had a railroad YMCA. That was the recreation center for us kids. It had a gymnasium, swimming pool, game room, and reading room.

Fry: How about athletics? Did you go in for sports?

Nelson: Oh, I went in for them all right, but I wasn't much good at any of them. I managed to get a football knee in that sport. My older brother was a star in all sports in both high school and college. In my second year of college I finally got smart, gave up the contact sports and auditioned for the men's glee club, which worked out very well. I even took some voice lessons and in my senior year sang the baritone lead in Gilbert and Sullivan's light opera The Gondoliers. But that is getting ahead of my story.

Fry: How about music in high school?

Nelson: Oh yes. I always wanted to play a trumpet. Instead I took some piano lessons. Then, about 1915, a violin teacher came to town who gave group lessons. Somehow I got roped into that, which I also did rather badly. I did play the violin in the high school orchestra, but I was a poor second fiddler. [Laughter] But it was

Nelson: fun. In the spring and fall we had great picnics, and in the winter we had bobsled parties which would end up at one of the homes for an oyster stew. Those were, of course, coeducational.

Fry: Oyster stew?

Nelson: Oh yes. There is nothing like a hot oyster stew following a bobsled ride in freezing weather. The oysters, of course, came from the East Coast.

Fry: I want to get back to your mother and father, particularly during your high school days. Did they have any hobbies that you remember?

Nelson: As I mentioned, Mother was active in the church. Dad enjoyed horses. He used them in his business as well as for pleasure. I remember an occasion at the county fair. Hod Payne ran a livery stable and, of course, had a number of fine horses and carriages. He had gone to great lengths in fancying-up his team and carriage for entry in the fair. Dad came home that noon, hitched Jim and Topsy to our surrey with the fringe on top, drove out to the fair and took first prize. It was a severe blow to Hod Payne. Our favorite horse, Jim, broke his leg when he stepped through a plank on the "16-to-1" bridge over the Des Moines River. Dad then put both horses out to pasture and we got our first automobile, a 1912 Buick. As I mentioned before, Dad believed in hard, honest work. He always insisted that if anything was worth doing at all, it was worth doing well, which I think gave me a bit of philosophy that has stayed with me. Dad was a Republican except in 1912 when he was a Bull Mooser for Teddy Roosevelt, whom he admired.

Mother had a way about her. If I raised any problems or questions, she would discuss them with me, and finally tell me, "Now, that's your decision--you make it." That was pretty sound philosophy too. She was a wonderful person.

Fry: How about reading material? Any childhood magazines?

Nelson: Oh yes. I read Boy's Life, The American Boy, The Youth's Companion, and the Saturday Evening Post. I think I read all the Tom Swift and Horatio Alger books. They were adventure and success stories. All the Horatio Alger books carried the same message--keep your shoes shined, be honest and work hard, and you will be a success. Once in a while the hero even married the boss's daughter. I also read Zane Grey's western novels. Oh yes, Scott's Ivanhoe and Victor Hugo's Les Miserables (that one I read twice).

Fry: You mentioned your family's first automobile. When did you learn to drive?

Nelson: I must have been fourteen or fifteen. Traffic wasn't very bad then.

Fry: Well, the roads weren't so good either.

Nelson: That was for sure. Mostly gravel, dirt and mud, good old Iowa gumbo. Of course, we had a good old Model T Ford for work purposes. In 1919 Dad bought a beautiful baby blue Chandler which the girls loved.

Fry: Did you take any trips that you remember specifically?

Nelson: Yes. In 1914 we got a new Overland touring car. Dad, another man, my older brother, and I drove to Aurora, Nebraska for a trip to look at some farm land that was in the family. I remember we made 313 miles the first day to Fremont, Nebraska.

Fry: Now, that was pretty good. What were the roads like?

Nelson: The roads were all dirt with some gravel. There was another trip. I must have been eight, for my younger brother was still in a baby carriage. Mother and we three boys went to Mulvane, Kansas to visit her parents. It was summertime. She also had two brothers and a sister living in that general area. I remember two things: It was terribly hot, and Grandfather paid us half a cent per gallon for picking blackberries. I didn't pick many. [Laughter]

Fry: You mean you really didn't consider that adequate?

Nelson: I certainly didn't. We should have gotten hazard pay because of the thorns.

Fry: You had two brothers. What became of them?

Nelson: My older brother, Emery, three years older than I, enlisted in the army in World War I, became a sergeant in the transportation corps. After the war he went to the George Williams YMCA College in Chicago. He spent his life in YMCA and church work. During the 1950s he worked out of the New York office and was responsible for raising all the money for the world YMCAs. He was an expert at raising money. In the '60s he became vice-president of George Williams College, and on that job he raised some $16 million for the purchase of land and the construction of a new college in Downers Grove, Illinois. He died in 1973.

My younger brother, who was eight years younger than I, was caught in the Depression of the 1930s. He stayed at home and worked with Dad in the plumbing and heating business, which was a bit slow during that period. He enlisted in the Seabees during World War II and served in both the European and Pacific theaters. When Mother

Nelson: died in 1942, his wife, Louise, and her mother moved in and took care of Dad, whose health was failing. After the war, Kenneth went to work for the Ames Laboratory of the U.S. Atomic Energy Commission at Iowa State University where he became foreman in charge of the plumbing department. Because of our differences in age, I never really got acquainted with him until the late '60s when I returned to Ames as a member of the Forestry Department staff. It was a real pleasure to get to know each other after all those years.

Fry: Now, let's see. I believe you mentioned graduating from high school in 1919. Wasn't that about the time a depression hit?

Nelson: Yes. That was a minor depression (in comparison with the '30s) following the First World War. Before I leave high school I should mention that it was during my senior year that I had a few dates with Sadiebelle Friedley. Nothing serious, yet.

Fry: Did you go straight to college?

Nelson: Yes, I went to the University of Iowa at Iowa City. My best friend, Bob Munn, and I went there together. There was one difference. He was better heeled financially than I. He immediately joined a fraternity, but I had to work my way. There was a brand new men's dormitory, and I got a job as janitor for $35 per month and one meal a day.

Fry: And time to study if you worked real hard?

Nelson: That's right, but I didn't like the University. I wasn't ready for it. Maybe it was too sophisticated for me.

Fry: What do you mean "sophisticated"? Urban versus rural, or something like that?

Nelson: Well, it could be. The fraternities and sororities were very strong. If you weren't in one, you had no status. Like many young students, I didn't know what I wanted to take. I went there for two quarters and transferred to Iowa State College at Ames and enrolled in animal husbandry. It was during that period that I got interested in forestry through some contacts with forestry students. I liked them, and I guess the romance of the woods appealed to me. By the end of the spring quarter I was about broke, but I was restless and I wanted to see the West. So my friend Bob Munn and I rustled up $50 apiece and headed for the great open spaces for the summer of 1920.

Traveling in the West

Fry: Fifty dollars wouldn't last long, even in those days. Where and how did you go?

Nelson: Right, $50 wasn't much but it gave us a start. We took the train to Omaha. During that period the railroad companies were shipping men west to work on railroad projects. They called them extra gangs or "gandy dancers." So in Omaha, for a couple of dollars at an employment office, we got on an extra gang shipment headed for Douglas, Wyoming. We didn't fancy ourselves working on an extra gang. We visualized bedbugs and other things in the railroad cars where the crews lived. So we jumped our shipment at Douglas, which was a customary thing to do in those days, if you could get away with it, and bought a ticket on to Casper, Wyoming, where we thought we could probably get a job in the oil fields, which sounded rather intriguing. We got there, and as you mentioned earlier, this was in the first depression following World War I, and there just wasn't any work to be had.

By then we'd been several days out, and our money was getting short; so we went again to a hiring hall and paid $2.50 for a job on a sheep ranch, putting up hay, up in the Big Horn Mountains east of Worland, Wyoming. Well, we still had to get there. So that night we decided that we'd spend the night in the railroad depot. With our luck there was an extra gang shipping into Greybull, Wyoming. We learned that some of these guys were going to jump their shipment at Casper; so we joined the crew and got on the train with them the next morning and told the conductor that we were a part of the extra gang. He didn't believe us, but we were just a couple of kids and I think he felt sorry for us and let us ride. The first water tank they came to, they stopped the train and threw four men off that were playing the same game we were. When we got to Worland, we got off the train and caught a ride on a wool truck which took us out to the ranch where we were to work, putting up hay, about ninety miles east of Worland.

We worked there long enough to make about ninety dollars apiece. From there we went to Cody, Wyoming and, for $55 apiece, we took a five-day tour through Yellowstone National Park, which was, of course, fascinating for kids from the prairie.

But there again, we were getting low on funds. Some way or other we got into Butte, Montana, thinking we'd get a job by working in the copper mines. But there again, they were not hiring. So we again went to the hiring hall and shipped on a railroad extra gang to Moses, Washington. We jumped that shipment at Spokane and shipped from there to Tacoma on another extra gang. There we tried to get a job in the logging woods. I still wanted to get out into the woods.

Nelson: The IWW were active and they were raising cain in the logging operations, striking and one thing and another. This being the depression period, there were no jobs. So we fooled around Seattle and Tacoma for a few days. Took a swim in the Sound and found out that the ocean was really salty. Then we went to another hiring hall to see if we couldn't work our way back east.

Well, we got a job on an extra gang shipping into Plains, Montana. But this time they fooled us; they made us check our baggage. So we had to get off at Plains, Montana. Bob and I got off the train first and ran down to the baggage car to get our bag. We had combined everything we owned into one bag by that time. We met a forest ranger coming up the platform, and he wanted to know if we were the crew that was hired to come out there to fight forest fires. We told him we didn't know anything about fighting forest fires, or the crew, but we were ready and willing, so he took us on. He took on several of the others also, and they trucked us out to the end of the road at the old Rock Creek Ranger Station on the Cabinet National Forest.

Here we were a fire crew in the event of a fire. We spent our time building a fence around the pasture, because everything was foot and horses from there on in. On a Sunday afternoon we had a severe lightning storm which started fires all around the country. The fire guard pointed out on a map to Bob and myself where one fire was and told us to go there and put it out. They didn't give us any instructions to speak of as to how to do it. They gave us a few iron rations and a grub hoe apiece and marked out a route on the map. So we struck out for this fire up at the head waters of Deer Creek, a tributary of the Thompson River.

We left the Rock Creek Camp about five o'clock that evening, and we found the fire the next day, about noon, way up on top of a high ridge. The fire was in the top of a tall snag. We couldn't cut down the snag with a grub hoe to put the fire out. We cut a line around the snag so that the dropping embers wouldn't spread the fire, and then we tossed a coin to see who went back to the ranger station to get a saw and axe and the necessary tools to fell the snag with.

And, of course, on that kind of a deal I always win; so I had to do the sixteen-mile hike back to camp to get the tools and bring them back, and we felled the tree and got that fire out. Well, it was only a short time later that they had another fire, a rather severe one, and we hiked about a day and a night to get into it. They had a large crew on it, all serviced by pack trains. This fire gave us some real trouble. I decided right then and there that I didn't want to spend my life fighting forest fires. By then it was time to get home so Bob could get back to school. I had no money

Nelson: to get back to school with, so we left that job and bought our tickets for home. We had had a wonderful summer, where time, place, and schedules meant nothing. We had five dollars apiece left.

So Bob went on back to school and I finally got myself a job on the Fort Dodge, Des Moines and Southern Railroad, checking cars on the rip track, at $70 a month. As I look back, I am sure that that summer had a great deal to do with my decision to study forestry.

Fry: You went to work on what kind of a track?

Nelson: The railroad "rip track" they called it. So I spent that winter and the next summer working on the rip track, where they rebuild freight cars.

Fry: Were you actually working on rebuilding the freight cars?

Nelson: I was checking cars, mostly. Checking all the material that went into the rebuilding process and keeping those records. When I got caught up on my work, I would help the blacksmith or help unload lumber or anything just to keep busy. So, come the fall of 1921, I wanted to go back to school; by that time I'd forgotten the miseries of fighting forest fires in Montana and decided that forestry was for me.

Fry: That was your first really definite decision?

Nelson: That's right.

Fry: Was there anything in your high school background that made you consider forestry as far back as that?

College Days, Iowa State University

Nelson: I think not. I didn't know what I wanted to do. At that time I wasn't much worried about it, either, I think probably like a lot of other kids are, even today. Still, when the chips got down I had to make a decision. So I enrolled in forestry in the fall of 1921.

Fry: At Ames?

Nelson: Yes, it was Iowa State College at that time. There were three men who had a rather profound effect on my life. G. B. MacDonald, who

Nelson: was head of the Forestry Department. He was a wonderful man. That fall, Dwight Jeffers had left the Forest Service and reported to Ames as a professor of forestry. He had been supervisor of the Arapaho National Forest. He was, I think, the finest teacher I ever came in contact with. He was an idealist, a driver, and yet very practical. He was one of those men who inspire a person.

Then there was one other, who was a new professor on the staff of Forestry, Horace J. Andrews, who had worked in private industry in a number of regions of the country. He was a complete opposite of Jeffers, in approach; he was a rough and tumble practical individual. The two of them, while very different, complemented each other very effectively. Horace J. Andrews finally became Regional Forester in Region Six of the Forest Service, Washington and Oregon, and later was killed in an automobile accident, which was a tragic loss for everyone.

Professor Jeffers finally left Ames and went to the University of Washington as a professor, earned his doctorate, and from there became dean of the School of Forestry at Idaho. Today he's more than eighty years of age. Until recently, he did some teaching at Oregon State.

Fry: Are you able to keep up with these men now?

Nelson: He's a very close friend. In my last year of high school I became enamored with a girl--of course, Sadiebelle Friedley. She went to Ames the same year I did, '21. As she also had to work her way through, she lived with Professor Jeffers and his family the first year and helped babysit and keep house and one thing and another. I got myself a job waiting tables, firing the boiler, and doing handiwork for the Kappa Delta sorority. I lived in the basement of the Kappa Delta house with another chap, Charles (Buzz) Wheeler, also from Boone. We managed to put in about thirty hours a week working for our board and room for the Kappa Deltas. I did that for three years, going through school.

In the summer of 1922, it was necessary to attend the forestry summer camp on the Pisgah National Forest in North Carolina. That was a very interesting and worthwhile summer with both Jeffers and Andrews as our field professors. Here we learned to cruise timber and do the necessary surveying and mapping. We saw logging with bull teams in the hardwood country, and we saw high lead logging in the spruce and fir of the higher elevations. It was a very interesting summer. In the summer of 1923, four of us from the school went to Arkansas, where we cruised timber for the Crossett Lumber Company. An interesting summer that year.

Fry: Now, let's see, did you say that was also a previous summer?

Nelson: That was 1923. The following summer, yes.

Fry: Maybe you could stop here and tell us about what sort of things you did in summer camp. What did they have you doing?

Nelson: We were learning to identify all the trees and we did a lot of timber cruising and mapping. It was largely seeing how things were done in the logging operations, both the bull teams in the hardwoods (that was about the last of the bull team logging), and then we got into this high lead logging in the coniferous forest. We also visited various kinds of manufacturing plants.

Fry: During the regular school year, what type of work did you have to do in the woods?

Nelson: Not much. It was mostly laboratory--wood technology, mensuration, silviculture, forest policy. And of course we had to have all of the prerequisites--engineering, botany and pathology and economics. Yes, chemistry, physics, mathematics. I did pretty well with everything but mathematics; that was difficult for me.

Fry: When you worked for the Crossett Lumber Company, as you look back on it now, how do you think that they were progressing in the general field?

Nelson: It was one of the most progressive companies. They had a completely integrated plant which included a saw mill, a veneer mill, and a chemical plant. They had a very high level of utilization for that time. They were harvesting mostly southern pines, lob-lolly, and shortleaf. They were expanding their holdings, and our job was cruising, mapping, and estimating the volumes of timber on the new lands that they were acquiring. A delightful summer. Here again, we found a lot of interesting people. In the field we lived with families near our work area. The company forester, W. W. Williams, arranged with them for our board and room. Most of them had a small clearing in the wood. They raised garden crops, chickens, maybe a cow, a small band of goats, and some wild hogs. Some had enough land cleared so they could raise a few bales of cotton; that was their "cash crop." We lived with them and they were a most generous and delightful people after you got acquainted with them. They had very little, but what they had they would share with you.

Had some interesting experiences too. We lived in one place where the lady would spit on the skillet to see whether it was hot enough to put the eggs in. [Laughter] But I found one place I didn't want to go to live, because everything that crawls, creeps, or bites lives in Arkansas. I liked the people but I didn't like the climate. We had cottonmouth moccasins, copperheads, rattlesnakes, four classes of ticks, and the red bugs (or "chiggars" as they are better known). Any one of those things will give you the miseries.

Fry: Well, you found some of that in North Carolina too?

Nelson: We had some of that in North Carolina all right, but not quite so bad. But it was an interesting and worthwhile summer.

Fry: Who at the lumber company did you get to know?

Nelson: Well, we lived with one of the lumber graders, who was an old navy friend of one of the fellows I went down there with. So we'd spend our weekends in town. There was a nice group of girls, and we'd have fish fries, watermelon feeds, and dances on Saturday and Sunday.

Fry: Did the Crossett Company use professional foresters?

Nelson: Oh yes. W. W. Williams, a professional forester, was in charge of their forestry program. Then there was another forester by the name of Don Canterbury, who later went into consulting forestry in Houston, Texas. We've kept in touch pretty much over the years. They were a progressive company. They were conducting research in timber management at that time.

Fry: You mean with sample plots?

Nelson: They were working closely with the Yale University Forestry School on improving timber management. Professor Walter Meyer (retired), whom I saw recently, is still consulting for them. They were one of the most progressive companies in the South. A few years ago they sold out to the Georgia-Pacific Company. It was a family ownership--Crossett, Watzek, and Gates. I have since become very well acquainted with Peter Watzek, who is now (1966) president of the American Forestry Association

Fry: How did you get the job?

Nelson: Through the school.

Fry: They placed you around, then.

Nelson: Yes. In order to graduate, we had to have at least one summer of actual experience in the woods.

Fry: I see. And I suppose some of you went to national forests?

Nelson: Oh yes. They scattered to the four winds.

Fry: So you decided from your experience with the snakes and the frogs and the chiggars, that you might prefer western forests after that?

Nelson: That and, of course, I'd always been intrigued with the West. I think that's one of the curses of California today: Too many Easterners are intrigued with the West and particularly with California.

Fry: Well, so you had one more year at school after your Crosset job?

Nelson: No, that was '23; I had two more years. So the second, '24, I went back to Ames, of course, continued to work at the Kappa Delta house, and did odd jobs wherever I could pick up a dollar or two--babysitting, washing windows, or what-have-you. I also did some hourly work for the Forestry Department. I mentioned earlier that in high school I tried to follow the footsteps of my brother in sports. Well, I tried a short time in college too; but I finally found out that it wasn't for me, so I joined the glee club. [Laughter]

Fry: From football to song?

Nelson: Yes. We had a lot of good times traveling with the glee club.

Fry: Where did you travel then?

Nelson: Oh, around the Middle West. We had an excellent glee club. In my senior year I sang the baritone lead in the Gilbert and Sullivan opera The Gondoliers.

Fry: What about Sadiebelle--was she interested in that?

Nelson: Oh well, see, we were--we were still enjoying each other, and the usual.

Fry: She wasn't in the opera?

Nelson: No. No, she didn't go in for that. She worked in the college library most of the time she was at school.

Fry: Did you run for any offices in high school or college?

Nelson: No, I didn't; I was active, though. I was president of the forestry club at Iowa State for one term; I was on the senior staff which put out the Ames Forester, for which I was associate editor; I was active on committees in the College of Agriculture. We always had a spring field day in agriculture, and forestry played a role in the program.

Fry: Were you taking agriculture courses?

Nelson: No, you see, forestry was in the College of Agriculture; so we got involved in the field days. I was chairman of an outdoor dance at

Nelson: one of those field days. Since Iowa is famous for its sudden thunder storms, we decided we should have some rain insurance. But we were on a tight budget. The dance was scheduled to start at four o'clock in the afternoon. We pondered as to whether we should take out rain insurance or not. We had built our dance floor out in the open. We finally decided that we would take out rain insurance up until four o'clock; we figured if it didn't rain until four, we'd be all right. At fifteen minutes after four, it just poured, and we lost our shirt! [Laughter]

Going back to your earlier question--between working and school work there wasn't any time for politics. Besides, I was not interested in politics at that time. In fact, I never did get active in partisan politics.

Fry: Sounds like you were pretty active, though.

Nelson: Yes. Then in the summer of 1924, I stayed home and worked for my dad in the plumbing and heating business. I accumulated a little more money that way for my senior year. Going through school I had to borrow money; I borrowed from the bank--of course, my dad cosigned my notes--and I also borrowed money through a student loan fund to help out.

A graduate student by the name of Paul Dunn, who had a teaching fellowship, decided to leave school in November of 1924. Paul is a long-time friend. He had a very successful career as director of Conservation for Missouri, as dean of the School of Forestry at Utah State and then at Oregon State. He is now vice-president of the St. Regis Paper Company. Well, when he left school, his fellowship became vacant and Professor MacDonald gave it to me. It paid $60 a month. For the first time I was able to enjoy life without devoting so much time to survival work. With that I was able to move into the Delta Upsilon fraternity house and had a little more fun during my last year in college.

Fry: You were not a D.U. before that?

Nelson: Yes, I became a D.U. the year before. But this year, 1924-1925, I was able to move into the house. Of course, Sadiebelle (she was an Alpha Delta Pi) and I were pretty much in love at that time.

EARLY FOREST SERVICE CAREER

Joining the Forest Service

Nelson: In the spring of 1925 the federal government held the Junior Forester civil service examination for the U.S. Forest Service. I took this examination, for most of the job opportunities at that time were with the Forest Service. That was the last time that the examination was strictly in narrative form.

It was an all-day session in which we wrote as fast as we could for eight hours. I learned later that there were some four hundred who took the examination, and there were only some eighty that passed it. Only about twenty passed it who did not have veterans preference of some kind to put them over the passing mark; I, fortunately, was one of those twenty. I had a passing grade of 70.92, with seventy being passing. I just got over the wire. With that grade, I realized that there would be little opportunity to be called for an appointment under the Junior Forester examination, so I took the first job I could get. That was with the Bureau of Quarantine on blister rust control in Idaho. I reported to Spokane. From there we were taken to Santa, Idaho for a couple week's training course on cruising the white pine timber country for the incidence of blister rust.

California Bound

I'd been there about a week when I got word of a job in California. It happened that my roommate, Webster, and Sadiebelle went to the college post office at the same time one morning. Webb was in the act of dropping a letter in the mail slot. Sadiebelle asked him what he was doing and he said, "I'm forwarding a letter to Swede." She said, "Let me see that." It was from the U.S. Forest Service, in San Francisco. She took the letter over to Professor Jeffers, and they decided it was probably a job offer. So they opened it,

Nelson: and then they started to try to get in touch with me in Santa, Idaho, which had very poor communications.

When I came in to camp, off the cruise line on a Friday night, I learned that there was a call for me from the Western Union office at Emery, Idaho, which was not open at nights, but that the message was something about a job in California. I decided that if there was any chance for a job in California, I'd better get where the communications would be a little bit better. So I quit my blister rust job that night and called the Western Union operator the next morning. She read me the wire, which came from Sadiebelle: "A possible job as scaler in Truckee. Report July 1. Wire Mr. R. L. Deering, Forest Service, San Francisco." I told the telephone operator to wire Mr. Deering that I would be there July 1. And the operator said, "This is only a possible job; nothing sure about it." I said, "You tell him I'll be there."

I had $2.50 in my pocket and a ticket as far as Portland from Spokane. I still hadn't received my last month's $60 paycheck from the college, as a teaching fellow. When the stage came in to Santa that morning, which I was to take back to Spokane that afternoon, it brought me my last month's paycheck of $60. So I was able to get into Truckee on time without riding the rods, which I had expected to do. So I reported for duty at Truckee on June 30 and went to work scaling timber on a Forest Service timber sale.

Scaling in Truckee, California

That brings me up now to where I have reported for duty with the Forest Service. This started, I think, one of the finest periods of our lives (I say ours--Mrs. Nelson and myself). My first assignment in the Forest Service was a week's training under an old scaler by the name of Percey Hook, on a Joe Casey timber sale out of Sierra Valley. The Joe Casey sawmill was in Reno. It was a donkey logging operation with railroad access. During that first week there, I made a very interesting acquaintance or contact with Mr. T. D. Woodbury, who was Assistant Regional Forester in charge of timber management, and his assistant, Tony Dunston, who came out to inspect the timber sale that we were working on. With them was Cap [I.F.] Eldredge from the Washington office.

Fry: You mean he was the assistant for timber management on Tahoe National Forest, or for the whole region?

Nelson: No, Woodbury was Assistant Regional Forester, in charge of timber management for the California Region, out of San Francisco. So I was

Nelson: innoculated with some of the inspectors the very first week. After a week's training, learning to scale, under Percey Hook, I was assigned to a Hobart Mills timber sale, at old camp twelve, where I spent the summer of 1925 scaling timber.

I learned later, when I got acquainted with Robert Deering, Assistant Regional Forester in charge of Operations, that he chose my name from the junior forester eligible list as a long shot. He wanted someone low enough on the eligible list so that he wouldn't be offered a job during the middle of the scaling season. So, I got a break there. It was only a temporary assignment, but the Tahoe Forest, under Millard Barnum, who was my immediate supervisor, and R. L. P. Bigelow, the Forest Supervisor, brought me into Nevada City that fall for temporary winter work on timber cruising, mapping, compilation of scaling data, and things of that nature.

Feather River Training School

Before reporting to Nevada City, the Forest Service initiated a new training camp that fall, known as the Feather River training camp, situated at the old Feather River Experiment Station near Quincy, on the Plumas Forest. This was another break. Here I was, a young "white fir Willie," as we were known in those days. I got in on the region's first training school. All of the top men from the regional office gave us courses and gave us a chance to get acquainted with them. There were eighteen of us trainees at the camp; it was a six-week session. Of that eighteen, only nine were still on the job by the time next summer rolled around. I guess it was used as a weeding out process. I think probably--no, I know that I am the only one of that group that is still active; most of those nine have retired, and a few of them have died.

Fry: When you first came out to Tahoe Forest as a scaler, you had not had any experience in scaling in western forests, had you?

Nelson: No. I hadn't had any experience in scaling at all. That's why they gave me a week's training session under Percy Hook--to teach me how it was done. I knew the theory, but I had never actually done any of it.

Fry: Where was this scaling done, actually?

Nelson: On the timber sale I was handling. Most of it was done at the landing where the logs were loaded onto the railroad cars. And, of course, I supervised the general logging operation. My supervision, I imagine, was rather thin; but I did it by working with the

Nelson: loggers. There was one set of fallers, with a Missourian and an old Swede faller. The Missourian was very lazy, and when I had time I'd go out there and spell him, and the old Swede would teach me how to fell timber. So by working with them, we got along beautifully.

In those days it was steam logging with the donkeys (steam engines) which would yard (pull) the logs to the landing where they were loaded on railroad cars. The hauling cable was run through blocks high on a spar tree. Of course, there was a tree topper to prepare the spar tree. When the tree topper went to prepare a new spar tree, I went along to see how it was done. He topped the tree about eighty feet above the ground. He had two large limbs just under where he made the cut, on which he stood while doing the topping. I very naively yelled up to him, "Come on down and I'll go up and cut those limbs off." Well, he immediately called my offer and came down that tree like a squirrel and said, "It's all yours."

Well, I'd never had a pair of climbing spurs on, but it was too late to back out then. So I put them on, and with his instructions, I got up the eighty-foot tree and I cut the limbs off. Then out of curiosity, I wanted to see the top of the cut. So I gave the safety rope one more flip, and it just missed from going over the top. If it had, I wouldn't be bothering you here today. That was it; that finished me as a tree topper. But it was an interesting experience.

At the Feather River training school, I got acquainted with one of the wonderful men in the Forest Service, Paul Peter Pitchlynn, who was the personnel and training officer for the California Region, a man with whom I became quite close in later years and a man to whom I owe a great deal for encouragement and leadership in my career. You know, I think an individual's progress is--well, it's based on merit and one's ability to do a job. But there is a certain amount of opportunity--maybe luck--along with it; coincidence of one kind or another. I think I can narrate a couple of those instances at this time.

In the spring of 1926, I was still on temporary assignment on the Tahoe Forest. Hobart Snider, who was the ranger at Truckee, injured his back while maintaining a telephone line. He fell from a pole, and the injury put him off of the job temporarily--at least for a year. There was need to fill the job temporarily, and they offered me the opportunity as ranger on the Truckee district.

Truckee District Ranger

Nelson: So in the spring of 1926, I went to Truckee as Ranger. This was my first real assignment in an area of responsibility, where the job was all mine. We had a handful of summer employees; I had one old-time ranger by the name of [J.A.] McIntosh as an Assistant Ranger. Here I was, just a new professional forester with this old-timer; but he proved to be very helpful, and we got along beautifully. I had a few good experienced firefighters on my summer crew; with this handful of people, we started the season. On the 19th of July, we had a very bad fire down the Truckee River Canyon, known as the Iceland fire. It started off the railroad, probably set by hoboes from their "jungle" camp a few miles above Floriston. This fire was my first baptism of fire on my own.

Fry: Did you actually direct the fire crews?

Nelson: Yes, that was my baby. The supervisor sent in a lot of good help and some old-timers. I've always respected these old-timers; while they didn't tell me how to run the fire, without my knowing it, they gave me a lot of good instructions and leadership which turned out to be an excellent training session. We had a number of bad fires that summer.

We had one fire up at an old abandoned wood camp that was not too far from the present Squaw Valley. Some moonshiners--this was during Prohibition days, you will recall--had set up a still in some of the old camp buildings. One day the still blew up and scattered fire all over the country. We were fighting fire in those days with the hoboes out of the jungles and from Reno; we had to sober most of them up before they were any good on the fire line. When we found out the fire was caused by a still blowing up, we got the sheriff, and he dumped all the residue liquor and mash down the creek. Those hoboes practically drank the creek dry, trying to get some of the flavor.

Fry: Did you fight fires mainly by hand work in those days?

Nelson: It was just a hand job, digging and cutting a fire line around the fire. We didn't have bulldozers; we didn't have tank trucks; all we had were pick-up labor with shovels, saws, and axes. Most of our firefighters were what we call "Reno boosters." They were pretty much the lower level of humanity.

Fry: These were your hoboes.

Nelson: Yes, they lived in the jungle and picked up a few dollars here and there, and then they'd gamble it away. They didn't have much

Nelson: motivation or object in life. We had trouble; some of them would keep the fire going just so they'd make a few more dollars. So, it was a rather difficult process.

Fry: Well, what about incendiarism?

Nelson: We had some. We had some incendiarism from the hoboes. But other than from them, we didn't have such trouble.

Of course, Lake Tahoe at that time (and my district included the north half of the lake) was a beautiful body of water without too much development around it. What I see as I go back to Lake Tahoe today is not so good. I knew it when it was really lovely and the little old steamboat was delivering the mail and supplies to the resorts around the lake. It was a wonderful area.

Fry: At the time you were there as a ranger, did the checkerboard pattern of ownership exist on that forest, and did it bother you any?

Nelson: Oh yes. On the Tahoe forest nearly every odd section is privately owned, which makes it very difficult for administering or managing the public lands. It also complicates the management of the private lands. One can't get the degree of management for either the private or the public lands that you would get if they were in consolidated holdings.

Fry: I was wondering if you had any problem with fires starting on private land?

Nelson: Well, we handled those; we didn't pay any attention to ownership, on fires. The job is to get the fire out, regardless of ownership.

Fry: Who were your private owners then? Now they're summer dwellers?

Nelson: The Hobart Estate Company owned large properties north of Truckee and in the Incline area on the Nevada side of Lake Tahoe. The Crown Willamette Company, now Crown Zellerbach; their holdings now are held by Fiberboard in large part. Of course, the Southern Pacific Railroad had the largest holdings. They were granted the odd-numbered sections for twenty miles on either side of the road by congressional acts of 1862 and 1864. We had lots of grazing; lots of sheep grazed on the forest from Nevada and the Sacramento Valley each summer. It was an interesting experience with the Basque sheepherders. They were fine people. They knew how to handle sheep. They did a pretty good job of overgrazing some of the ranges too.

Fry: They just couldn't count sheep, was that it?

Nelson: We counted them in and we counted them out, but they hit the ranges pretty hard, as they had for many years. In the early days, there was

Nelson: no control or regulation of grazing. It was open-range, and there were many tramp sheep outfits which owned no land. They were migratory in their operations--always on the move. Often the same land would be grazed by one band after another.

The more stable owners had a home ranch and grazed a given area year after year which many of them controlled by acquiring the water holes. They opposed the tramp outfits.

When the national forests were created, one of the big and difficult jobs was to bring the range use into balance with its carrying capacity. On severely abused ranges this has yet to be completely accomplished in some places. Of course, in those days (mid '20s) sheepmen were making money. I knew one Basque sheepman who was maintaining a suite in the St. Francis Hotel in San Francisco; they were in the chips. But when the crash came, they lost everything they had. I enjoyed working with those people; they were very interesting.

Fry: How are they to work with?

Nelson: I found them very good. Of course, they'd got all they could out of the range. The Basque herder is a very interesting person; he knew how to handle sheep. There aren't many large bands left today. One of the reasons is the difficulty of getting good herders.

Fry: Did you have any miners up there then?

Nelson: No, no miners in that part of the forest at that time.

Fry: What about timber management activities you had as a ranger?

Nelson: We had some; our major timber sales were handled out of the supervisor's office by the Junior Forester Millard M. Barnum. I handled measuring of cordwood for the Crown Willamette paper pulp mill, which was located at Floriston, down the Truckee River Canyon. That pulp mill later had to be abandoned because of the pollution it caused to the Truckee River.

Fry: Did this come under your jurisdiction, the pollution of rivers?

Nelson: No, that was a state responsibility. As I recall, the city of Reno got an injunction against the company which forced the closure because of pollution. The company had pumped all of its waste material up onto a mountain top, but ultimately the waste liquor seeped down through the geological formations and into the Truckee River and caused the pollution.

Fry: Did you have many dealings with the Crown Willamette pulp mill?

Nelson: Oh, about the mill? Yes. I had quite a few dealings with Crown Willamette on their wood sales--here again, very cordial dealings--and the Hobart people were the same; they were very cooperative. We maintained a campground on the east shore of Lake Tahoe at Incline on Hobart Estate land. They permitted us to maintain a public campground there, so that the people could enjoy one of the finest sand beaches on the lake. When we get up to 1937, I'll have a story to tell about that.

Fry: I was wondering if you had any indication of any serious pursuit of sustained yields? On the adjoining private lands.

Nelson: The Forest Service always had. They always had the concept of sustained yield, of continuous production. On the private lands it wasn't really considered. By and large, they did a fairly good job of logging, particularly where the timber was composed of mixed age classes. Here they naturally got a modified selection cut, without trying. It was pre-tractor and it wasn't devastating; however, in even-aged stands it was pretty closely cut. Of course, on the natural forest timber sales, it was all done on a selective cutting basis. We marked the timber and required them to pile the brush. Then in the fall and winter, after the first snows came, we'd go out and burn the brush, to reduce the fire hazard.

Fry: I wanted to ask you if, in your scaling, you scaled alongside a scaler from the company?

Nelson: Yes.

Fry: And how did you reconcile the differences?

Nelson: Well, he scaled the company logs (they were logging both company and government land at the same time); he scaled the company logs and I scaled the Forest Service logs. We had a "check-scaler," Mr. "Uncle" Joe Elliott, out of the regional office, who checked my scaling. no problems. A couple of times I took the logging train down to the sawmill at Hobart Mills in order to watch the logs go through the sawing operation. Most serious defects, such as heart rot, were visible on the end of the log. The problem was to estimate what percentage of the log was defective. By watching the logs go through the sawing operation, I was able to get a fairly good idea of how to estimate the defects.

Fry: Mr. Nelson, one thing that we're trying to do, concurrent with your interview, is establish what was done in private forestry along these times, and I wonder if in your experiences right here at Tahoe you were able to see any beginnings of interest in forestry on the part of the private concerns.

Nelson: Not a great deal. They were concerned with getting the timber out and producing the most profit that they could. In the 1920s most of the logging operations on the Tahoe forest were in the pure Ponderosa pine type. All major logging was done with steam "donkeys," and the log transportation was by railroads.

With the use of cables the donkey pulled the logs to a central landing where they were scaled and loaded on railroad "log cars" for transportation to the sawmill. If the logs were beyond reach of a single donkey, two or more donkeys would be hooked up in tandem. By this method it required a minimum of railroad trackage. While careless donkey or cable logging left few living trees on some logged-over areas, it did not severely disturb the soil. Thus, erosion was minimized.

Tractor and truck logging did not get under way until the mid '30s. Tractor and truck logging required more miles of road than was required by the railroad and cable logging method. In cable logging the logs were pulled uphill, while with tractors the logs are dragged downhill. This requires that most of the roads be located at the foot of the slope or near the streams. With the roads located near the streams and the tractors dragging the logs downhill, there is much more soil disturbance. Consequently, more erosion.

In further response to the question of private interests in better forestry, I present the following observation which extended over a number of years. By and large, the industry had not yet gotten seriously concerned about a future crop of trees. There were lots of forests yet untouched. But all their operations weren't bad. For example, there was no market for white fir and Incense cedar. Therefore, most of these species went unlogged on the private land. Later the Incense cedar was harvested, specifically to meet the demand for pencil stock. During and following World War II, mid '40s, white fir became acceptable in the market. The companies then went back and harvested the white fir that was left growing during their earlier harvest of the pines. Thus, their early decision not to cut the white fir proved to be economically wise and not particularly bad silviculture.

On the other hand, the Forest Service required the cutting of the white fir on their timber sales because they did not want to encourage the restocking of white fir. They considered it a "weed" tree. Unfortunately, most of the white fir harvested under that requirement was hauled on to the companies' land and dumped--a total waste. We learn some things the hard way. In the long run, I don't think there are any weed trees.

Fry: Did you have any problems with poachers there?

Nelson: No, we didn't.

Fry: You mentioned that you had a public campground established at Incline. Along about this period, were you experiencing a rise in recreation?

Nelson: There was quite a bit of recreation, yes. We had another campground on the west side of the lake about two miles below the Tahoe Tavern; a Mr. Roger Kent had donated about seventy acres to the Forest Service. It had sixty-eight feet of lake frontage. It had a gravel beach, but this campground got heavy use all summer long. We kept a caretaker there all the time; Mr. George Walling of Nevada City spent his summers there as caretaker of the campground. We had one small special use site for homes on the north side of the lake, east of Dollar Point, called Cedar Flat. It was a rocky area with no beach, but there were a number of attractive summer homes under special use permits.

Fry: I noticed that in this period, I think, if I have your dates right, there were some state parks created.

Nelson: There was a small state park right near Tahoe City, and it is still there. Bliss State Park, at Rubicon Point, was in being also. And Donner Memorial State Park was located at the east end of Donner Lake.

Fry: Did you have anything to do with that, then?

Nelson: No, they handled their own, and--oh, we knew the fellows, of course.

Fry: So your major problem, then, was fire.

Nelson: Our major problem was fire, with some timber sale business and working with the sheepmen. There were a few cattle, but mostly sheep at that time. But our big job was fire. It was largely a custodial job.

Fry: And at this point, through your training school, had you met Regional Forester Bevier Show?

Nelson: I met Show at the training school. And I'll bring Show in here in a moment if you're ready to go ahead. On December 28, 1926, at Christmas time, I went back to Boone and Sadiebelle and I were married. At that time, we maintained the ranger station in Truckee only in the summertime, and the ranger spent his winters in Nevada City at the headquarters office. So we came back to Nevada City. When we landed in Nevada City, I had $2.50 left in my pocket and a $150 check waiting for me. We had a small apartment for $16.50 a month. We spent the winter in Nevada City, which was a delightful place, particularly at that time; it was active, as the mines were operating. It was a very lively small mountain mining community. In the spring of 1927 there was a change of deputy supervisors on the Trinity National Forest and Millard Barnum, who was my immediate supervisor on the Tahoe, was offered the position. (Barney was deeply in love with June DeBergio,

Nelson: whose father had the hotel in Sierraville, and he wasn't about to move from the Tahoe.) So again I happened to be in the right place at the right time.

TO TRINITY NATIONAL FOREST

Deputy Supervisor

Nelson: I received a letter from Bevier Show offering me the deputy's job at Weaverville. He described Weaverville as a small mountain hamlet, situated about fifty miles west of Redding. Of course, I jumped at the opportunity. So we moved to Weaverville on May 16, 1927, as deputy forest supervisor, with a salary of $2400 per annum. It took us, at that time, over those roads, about four hours to drive from Redding to Weaverville, about fifty miles. We drove into Weaverville on a Sunday afternoon and drove up the main street. There was a cow in the middle of the main street and one old-timer sitting under the veranda of the New York Hotel. That was the only life we saw as we entered the town on a Sunday afternoon in May. Frank Price was the Forest Supervisor. Since we had no place to live, he and Mrs. Price took us into their home for a couple of weeks until we found a place to rent. We spent the next three years in Weaverville. Here was a wonderful small community of people, most of whom were born and raised in that old mining town. Some placer and dredger mining was still active.

I reported there as Deputy Supervisor in charge of fire control, range management, and timber sales; we had very little timber sales business. My work on the forest dealt primarily with general administration, fire control, and range management. The Service had a complete telephone system to all of its stations; that was the only communication system throughout the county.

I remember one edition of the Trinity Journal that stated Trinity County was as large as Massachusetts, Rhode Island, and Connecticut combined, but we only have about 2100 population. It was a rather sparsely-settled area. Two of the little communities in the county were still being serviced by pack mules for delivery of mail. During the summer season I would spend about half of my time with pack mules and a saddle horse in the back country checking on our fire control facilities, telephone communications, range inspections, working with grazing permittees, and things of that nature.

Fry: Do you mean that there was no private phones in the county?

Nelson: Only in and immediately around Weaverville and from Weaverville to Redding. There was a small telephone company there, and all of our lines fed through the company's switchboard. We had to maintain a switching facility at Hayford. Of course, all of the lines came through our home. We had five telephones in our home on different circuits so I could keep in touch with the fire situation at all times.

Fry: Was there anything different about trying to control fires here and the way that you had to do it at Tahoe?

Nelson: We didn't have as bad a fire situation. We had some incendiarism, but not too bad. We had some bad lightning situations. But of course, one of the great problems was travel time due to the lack of road accessibility. Any large amount of manpower had to come in from Redding or Eureka. We had a few serious fires. I remember one out of Hayford and one up in Canyon Creek that gave us a considerable amount of trouble. But our fire record wasn't too bad.

Fry: Was there much road building going on at this time?

Nelson: We had some going on. It was a pretty slow process in those days. We didn't have the modern road building equipment. We had some tractors and graders and some few things like that, but it was largely done with hand labor and powder. We had a small amount of money for trail construction at that time because that was the access into the back country. The trail construction and maintenance was handled by the district rangers. We didn't have a road engineer on the forest at that time. We did build a small airport on the outskirts of Weaverville, and that was the first air access to the county. (Mrs. Nelson made the first air sock for the airport.) We used that for our reconnaissance planes for fire surveys and so forth. That was the first air communication into Trinity County.

Fry: This was kind of early.

Nelson: Yes, it was in the late twenties.

Fry: These planes were used primarily as spotters and for reconnaissance for already-going fires?

Nelson: It is such rough country that it is kind of hard to get around to see where the fire is and then get back to camp and organize for its control. By the time that you got back to the fire line again, the problem would be entirely different. We would map the fire from the air and drop the map into the fire camp so the fire boss could get a complete picture of the problem. It proved to be very helpful.

Nelson: In 1927, Ranger George Schroeder and I spent a month fighting lightning fires in the headwaters of Brush Creek on the Klamath Forest. Then in 1928 Shasta had a disastrous fire on the east side of Mt. Shasta, known as the Stevens Pass fire. I went in to help on it. So, during this period I was getting some pretty good fire experience. Here again, Mr. Pitchlynn continued his training courses, and I was fortunate in getting to participate in most of them. He also carried on a correspondence course. Pitchlynn was a good trainer, and he took a special interest in us young foresters. The Washington, D.C. office provided much of the training material used in the correspondence courses.

I had one very interesting experience when I think I reached the peril point in my career. In the fall of 1927, the Society of American Foresters held its annual meeting on the Berkeley campus. At that time the professionally trained foresters were making some rather strong inroads into the Forest Service. Some of the old-timers seemed to resent these young college kids coming into the Forest Service and getting into rather important positions and obviously going further.

Fry: These were the men from the Pinchot days?

Nelson: That's right, many were the old cowboy-type. They were a group of very good men, believe me. Anyway, there was some resentment shown against these brash young college men who were called "white fir Willies." One of the issues up before the Society of American Foresters dealt with this subject. Major R. Y. Stuart was then Chief Forester and president of the Society. He was in charge of the meeting. (This was my first SAF meeting.) This subject was being rather heatedly discussed, and I felt that it was about time for someone of the young professional group to speak his piece. So I took a whirl at it, but I didn't do very well. [Laughter] I got nervous up there before all of the old-timers. I think I said just about the reverse of what I intended to say, or at least should have said. Anyway, I took an awful ribbing from most everyone I knew.

Fry: Was this competition revolving around any special issue?

Nelson: No, just the inroads of college foresters into the Service and the old-timers resenting it. It was an issue before the Society.

Fry: Did this take the form of requiring more experience before you could be appointed?

Nelson: I don't recall just what the details were. I just remember the impact on me because whatever I said was not the right thing at that time and place. As a result, I took a terrific beating. For some time I was sensitive to it, of course; everything that anybody said I felt was

Nelson: directed personally at me. I very nearly decided that the best thing for me to do was to get out of the Forest Service.

But then Sadiebelle and I talked it over, and we decided you can't run from a good fight. So the best thing to do was to learn to think and talk on my feet; speak your piece and let the chips fall where they may. I went to the high school superintendent in Weaverville and told him that I wanted to take on one of the high school classes for an hour a week. I figured that would be a chance for me to learn how to handle myself. So for one semester I did an hour's teaching a week in forestry-related subjects and activities. I really worked in putting those teaching courses together. Then I forced myself to speak at every opportunity, and I finally overcame my very obvious handicap. It was a good experience as it worked out. But those are just some of the pitfalls that one gets into and you have to work your way out of. Anyway, it proved to be a very important experience for me. Thirty years later I was president of the Society.

Our experience in Weaverville, both community-wise and service-wise was most satisfying. We made many lasting friends.

Fry: I want you to comment on working with Mr. Price.

Nelson: Well, Frank Price was one of those old cowboy-type supervisors, and a very fine man. He was most helpful as a training officer. He gave me a job to do, and he expected me to do it and assume the full responsibility for what I did (which was also good training). I think that is very important for any supervising officer.

There was a shift in supervising officers. Near my last year there--1929--Frank Price was transferred to--oh, I've forgotten where--and George Gowen came in as supervisor. George was a driver, a very meticulous driver as well as a nit-picker. I didn't mind the driving part because I always drove myself harder than I drove my men, but George had had his training under Supervisor Bill Durbin ("Paw" as everyone called him) on the Lassen. Paw Durbin was one of those penny-pinching conservatives. He was one of the old-timers that helped build many of the fine traditions of the Service.

Well, in those days in that country, when we traveled there were very few hotel accommodations, and we lived with the rangers. We paid the rangers 50¢ a night for a bed and 50¢ per meal, for which we were reimbursed. When George came on the forest, he said, "Now we will save this money. We will sleep in the hay mow in our bed rolls, and we will cook our meals over a campfire, and we will save this money. And when you get over to Forest Glen, where there is a special use resort on Forest Service land, we will camp in the public campground on the other side of the river and save the money that we would spend at the resort."

Nelson: I blew my cork on that one. I disagreed with him. It would be an insult to the rangers' wives and our own special use permittee. He finally accepted it. I had a number of run-ins of that nature with George. I felt the importance of the public relations with those people and the fellowship that we would gather living with the ranger and his family was much more important than sleeping out there in the brush by myself. Anyway, I didn't lose that battle. We had several run-ins of that nature. Otherwise George was a very fine man to work with. Our trails crossed again later, very successfully.

Fry: Did grazing continue to be a kind of a problem?

Nelson: It was a problem in some areas, particularly over in the Mad River District, where we had some small ownerships. The people grazed cattle, hogs, and sheep--just a handful of each--and they would always run a few extra head of each. Of course, we were trying to get the hogs out of the woods because they just root out everything. They are very detrimental to the range and to small trees because of their rooting habits.

Fry: So they weren't really allowed?

Nelson: Yes, they were allowed, but we were trying to reduce them. I doubt if there are any hog permits left.

Fry: These weren't Basque?

Nelson: Lots of them were the natives--half-breed Indians and people who were born and raised in that country, whose ancestors came to California by covered wagon.

Fry: Did you have many other dealings with the Indians?

Nelson: Oh yes, quite a few Indians worked for us. The Hoopa Indian Reservation joined the forest. We had quite a bit of incendiarism in the Hoopa Indian Reservation country.

Fry: Why was that?

Nelson: They felt that it made easier and better hunting to get rid of the brush, and they also liked to make some money fighting forest fires at 35¢ an hour. As I look back on most of our incendiary problems of those days, it was really a social problem--the people needed jobs. They did cause some problems. By and large it wasn't too bad, as I look back on it. We thought that we were working hard in those days, but it was a pushover compared to the demands of today.

Fry: Was there enough animals up there to make hunting and poaching a problem?

Nelson: We didn't have a poaching problem. There was probably more poaching in the back country than we realized. It was a long way to the meat market. There was a lot of deer hunting in season. Fishing was good on the Trinity River and the other streams--excellent trout, steelhead, and salmon fishing. This was before recreation became a major problem.

Fry: And so I wondered if at this time, since you didn't have any recreation officers or anything, if there was some problem in controlling campfires and things like this when you did have people come in.

Nelson: Yes, we permitted campfires. We issued campfire permits with a warning on how to take care of them. We had a few public campgrounds scattered around, but they were not heavily used in that country (except during the hunting season and when there was a heavy run of steelhead and salmon). The Trinity Forest and Trinity County were really back country in those days.

Fry: Well, it is still pretty back.

Nelson: Yes, it is pretty back, relatively speaking.

Fry: The wilderness area that is up there now, did this come in while you were there?

Nelson: The Trinity Alps? Well, I helped make the boundary recommendations on the Trinity Alps Wilderness Area back in the late twenties.

Fry: I'm not sure when that happened.

Nelson: I am quite sure that our preliminary recommendation for the Trinity Alps Wilderness Area was made in the late 1920s. When it was finally established as such, I don't recall.

Fry: What kind of criteria were used?

Nelson: As I recall, our major criteria was geared to a combination of beauty, such as the rugged granite mountains and high elevation lakes, plus a rather high degree of inaccessibility. I think we naturally avoided including major timber stands. Wilderness was the "back of beyond" country. Wilderness area had to exceed 100,000 acres. Anything smaller than that was classed as a primitive area. Back in the twenties no one was coveting the timber in the remote Trinity area. Today, the demand for more wilderness and more timber brings the preservationists and the timber interests into head-on clashes. Also the ever-growing horde of off-highway-vehicle groups are pressing for more areas for their form of recreation. The competition between all manner of pressure groups

Nelson: continues to complicate the administration of public lands. With modern equipment, any country can be opened up to exploitation, whether it be for timber, mining, or even recreation.

There are conflicts in management concepts. Some preservationists insist on letting nature take her course--don't put out lightning fires or don't control insect infestations, etc. On the other hand, there are those--and I am one of them--who believe in giving nature a helping hand--control the fires and salvage the killed and damaged timber; prevent insect epidemics when possible. Nature did very well, but she did it over a period of geological time. Mankind is here now, and there will be more tomorrow; so we must manage many of our resources if we are to maintain an adequate social order. I believe much of this can be handled in a compatible manner if we could get people to work together in harmony.

This does not mean that I am opposed to wilderness areas, parks, or the preservation of significant areas. We have the two extremes--the ultraconservatives and the exploiters. They each play an important role, for through the process of give and take and compromise, we usually maintain a reasonable balance. With the explosion of the environmental concepts in the late sixties, the conservative groups have become much larger, more vocal, and better organized. They have been very effective. Much of the struggle has been between these groups and the timber industry.

On the other hand, the timber industry has changed and improved many of its concepts and practices, partly in response to pressure groups; but also because of new technology in resource utilization, in broader markets, in finite timber resources, and in more effective methods of reforestation. However, I must admit that a high percentage of these improvements are due to technological changes and not due to social changes and public sensitivities.

Fry: When you were running the boundary on the Trinity Alps Wilderness Area, did you have to take any opposition at that time?

Nelson: There was no issue at that time.

Fry: There wasn't?

Nelson: There was no issue at that time because neither the Sierra Club nor the timber industry indicated any interest in the area. If it had not been for the foresight of the men in the Forest Service back in those days, there probably would not be as many wonderful wilderness areas as there are today. Under the leadership of Aldo Leopold of the Forest Service, the first wilderness area--the Gila Wilderness Area of New Mexico--was created in 1924. Of course, Bob Marshall gave it great impetus in the 1930s. In 1964 Congress passed the

Nelson: Wilderness Area Act, and since then many more areas have been designated.

Fry: Were you in on the original talk about wilderness areas?

Nelson: Not a great deal, no. I was pretty low on the totem pole then. I was carrying out the orders.

Fry: I was wondering if you knew why this particular area was chosen.

Nelson: It was a beautiful area, highly scenic, had no real commercial value, and here was a wilderness area.

Fry: Terribly remote.

Nelson: It was wilderness, as we conceived wilderness then, and as we conceive it today. It will always measure up to the criteria for a wilderness area.

Fry: Did you ever know Aldo Leopold, who was the big pressure, I think--

Nelson: No, I never knew him, but I know his son Starker Leopold, who is one of the real authorities on wildlife. We traveled through part of Spain together in the spring of 1966. I met Bob Marshall a time or two. He was one of the early sponsors of the wilderness concept. Unfortunately he died very young.

Life in the Trinity Forest Region

I think when I look back on it this was probably some of the better years of our lives. It was a small community. We had two churches, a community Protestant church and a Catholic church. When the Protestant church had something, the Catholics would help; when the Catholics put on a program or a dinner to raise some money, we'd go over and help them and everybody worked together in a very nice community fashion.

Fry: What other things existed in Weaverville at that time? Did you have things like the Elks Club or the Rotary?

Nelson: We had the Odd Fellows and the Masonic Lodge and the Eastern Star, of course (Sadiebelle was a member of Eastern Star; had been since a girl). I never affiliated with any of the fraternal organizations. But we soon became a part of the community.

Nelson: Shortly after we arrived there, the only piano player in the community moved out and that destroyed the dance band. Dancing was one of the main forms of social recreation. Sadiebelle was a pretty good piano player, but she'd never played for dances. The dentist was a good saxophonist, and the postmaster played the coronet. The saxophonist taught Sadiebelle the dance rhythm; while we lived in Weaverville, she played in the only dance band in the county. So, Saturday nights we would barnstorm all over the county for their dances. We had lots of fun.

Fry: Now what was the name of that Chinese you spoke of who lived in Weaverville? Moon Lee?

Nelson: Moon Lee and his parents were still living there. They had a grocery store. Moon Lee was a young man and very active in the community. There were two of the old-time Chinese still left, Sing and Fong. They took care of the old-time Chinese joss house. They grew and sold vegetables around the community. Always when we had guests we would take them down to the joss house, and Sing and Fong would pound the cymbals and explain how the Chinese would shake the joss sticks, select one from which they would get the prescriptions to cure their ills or advice to solve their problems. We became very fond of both Sing and Fong while we were there. Years later it was my privilege to participate in securing the Weaverville Joss House as an historic monument in the state park system. It is now beautifully cared for and its historical significance is effectively told to visitors.

Fry: Well, I am ready to move on, unless you have something to add.

Nelson: Maybe one incident. It may not be appropriate here, but it is an incident that indicates some of the ways of life in that country. Mr. Cronemiller, Assistant Regional Forester in charge of range management, and I had been on a range inspection trip in the Mad River District. We were traveling by saddle horse and were camped for the night at the Big Bar Fire Station.

Early the next morning the phone at the guard station rang, and we were informed that three men had broken into the Brizzard store at Willow Creek, a small community about sixty miles west of Weaverville; that the robbers had rolled the safe out of the store, put it into the rumble seat of an automobile and headed for Weaverville. Frank Graham was in charge of the Brizzard store at that time. He heard the commotion and he looked out of his bedroom window and saw what was taking place. He saw them leave and that they were headed east. Once on that road, they were committed to go through Weaverville. Graham phoned Bud Carpenter at Burnt Ranch, about fifteen miles east of Willow Creek. Bud was a deputy sheriff; he had a small store and also served as one of our fire guards during the fire season. Oscar

Nelson: White, another of our fire guards, was at Burnt Ranch that night. He had come down from the New River country for supplies. Graham told Bud of the robbery. Bud wakened Oscar and they were in the process of placing a barrier across the road when a car came roaring toward them. The car slowed. Bud jumped on the running board only to be instantly killed when one of the thieves emptied an automatic pistol into him. In the melee, two men jumped from the car as the driver left at full speed. One man grappled with Oscar. In that scuffle the robber was killed and Oscar was shot in the leg. The third robber escaped into the woods.

In Weaverville, Ernest Chapman, the undersheriff, quickly gathered a posse and barricaded the bridge over Weaver Creek. While all this was happening, more manpower was being recruited. They asked Cronemiller and myself to get into Weaverville and join the posse to help find the murderers and robbers. We borrowed a car and headed for Weaverville. On the way we met the district attorney, Horace Givens, and the coroner en route to Burnt Ranch. We stopped them to learn more about the situation. I will always remember Horace Givens. He said, "Fellows, these are bad men. If you find them, shoot to kill. There's a thousand dollar reward if you take them alive and two thousand dollars if you take them dead."

Fry: Oh no!

Nelson: [Laughter] That's the good Old West, you know.

Fry: Yes--no trial.

Nelson: As I had mentioned, Ernest Chapman, the undersheriff, had barricaded the bridge over Weaver Creek and, with his posse, was stopping every car.

It so happened that the first car through was an old model A Ford with a rumble seat. They stopped this car and asked the driver who he was, where he had been, what he was doing, and where he was going. The driver told them that he was visiting his brother in town at the Junction City Power House and that he was just getting an early start to go into Redding for supplies so he could get back before it got hot. They accepted his story and sent him on his way. It turned out later that he was the robber. They let him go without being searched, for they were sure that no one could have driven that road in such a short time.

We, the posse, scoured the hills for a couple of days and found nothing. Seven years later the fellow who escaped through the bridge block was picked up in a seaman's hostelry in New York City and convicted. We finally caught the one that had headed for the hills at the Burnt Ranch shoot-out. He came into our guard station up the South Fork of the Trinity River about a week later,

Nelson: all tattered and half starved. Our fire guard, Ammon, guessed who he was. He sent the thief down to pick some blackberries while he prepared a meal for him. While he was down picking blackberries, Ammon called the sheriff to come up there--twelve miles by trail--to get the thief. He had to keep him occupied peacefully till the sheriff got there. The thief turned out to be an ex-convict known as Dutch Pete. He went back to San Quentin.

Fry: Your job did have varied responsibilities.

Nelson: Yes, there was usually something to break the monotony.

SHASTA NATIONAL FOREST

Work Camps

Nelson: In May of 1930 I was transferred to the Shasta National Forest as Deputy Supervisor in charge of fire control. This turned out to be a real fire problem. We were in the Depression; thousands of unemployed were on the move looking for work, and the freight trains provided needed transportation. The Southern Pacific Railroad ran trains up and down the Sacramento River Canyon. Every freight train carried hundreds of men, often called "bindle stiffs," in their frustrated search for employment.

This Sacramento River Canyon was a veritable tinderbox during the summer months, and those men soon learned that if they set some fires in the canyon, they would get a job at 35¢ an hour fighting the fires. As a result, we had fire after fire in the Sacramento Canyon. Since we had no fire crews we would stop a freight train and get as high as five hundred men able and willing to fight fire. This was before we had bulldozers and air tankers, so everything was hand work with shovels, axes, and saws.

Finally, in 1932 we were able to convince higher authority that this was a losing game. We were given permission to hire a few 25-man crews and refuse to hire men from the trains. We paid the crewmen $25 per month plus board and room. The rooms were tents. This gave us our first organized fire crews. By boycotting all other types of fire fighters, we reduced the fire incidence greatly.

Fry: Was this in cooperation with any of the state activities at this time?

Nelson: No, but during the winter of 1932-1933 the state established what they called the labor camps. We had one of these labor camps in the old abandoned Lamoine Hotel. Lamoine was a very small community; really it was the remnants of a long-abandoned logging camp. We had about a hundred men working out of that camp on roads and trails during the winter, after which it was abandoned. These men were paid little more than board, room, and tobacco.

Nelson: About that time the CWA [Civil Works Administration] was started; the WPA [Works Progress Administration] and other alphabetical programs came later. Our CWA crew was made up of local Redding men, and they were transported to and from the projects each day by truck.

The best program of all was the Civilian Conservation Corps, which got under way in 1933. The CCC program was a joint operation. The U.S. Army ran the camps, which included all housekeeping, medical care, recreation, and related programs. The technical services, such as the Forest Service and Park Service, handled all of the work projects. The army furnished the camp commanders and the technical service provided the camp superintendent. Of course, each had a prescribed number of subordinates with essential skills. The success of a camp depended, in large measure, on the quality of leadership of the two top officers and the manner in which they worked together.

We had a number of CCC camps; I don't remember how many. Camp construction was an interesting process. The material for the camps was precut lumber that was shipped to the nearest rail head. We would transport it by truck to the campsite which we had previously selected. The army brought in a cadre of twenty-five enrollees. We would hire a few local journeymen such as carpenters, plumbers, and electricians, and we would build the camp. When the camp was finished, the balance of the company of two hundred men were moved in. With this work force we really got started developing access to a lot of the country. Our work projects included the construction of ranger stations, fire crew stations, forest headquarters, campgrounds, insect control, erosion control, as well as roads and trails. Of course, the camps were the backbone of our fire fighting force.

This was one of the finest programs that the Roosevelt administration initiated during the Depression period. Besides providing useful work for thousands of young men, it put lots of men to work in many industries such as producing the lumber for the camps, trucks for transportation, and other types of tools and equipment. It had a chain reaction all the way back to the point of manufacturing items. We hired local men as supervisors, engineers, architects, foremen, and many journeymen.

Just last week, a chap came into my office who was the architect for all of our building. I hadn't seen him since the thirties. After the CCC program, the Depression, and World War II was over, he went into his own architectural design and construction business, and the last job that he did was the new federal building in San Francisco. He did all right. He is now retired.

Fry: In setting up these camps, did you get to have much of a voice in where the camps were going to be in your particular forest?

Nelson: Oh yes, that was our responsibility; we selected the site for the camps. The site needed to be reasonably level and have a good water supply. The program was originally scheduled to last six months, but it was not completely liquidated until 1941. The program tapered off during '39, '40, and '41.

We still are using some of the old camp buildings, but most of them have been torn down, the materials salvaged and used again. Of course, it was during this period that we really started to build campgrounds and also some winter sports facilities in the national forests. If it hadn't been for that period and that program, there would be many fewer roads, fewer campgrounds, and fewer good administrative facilities available throughout the forests and parks than there are today.

Fry: What kind of workers did you think the CCC boys were?

Nelson: On the average, they were very good workers, particularly where we and the army had good leadership. They were better than our recent experience with a type of job corps which California recently started [early '60s].

Fry: Oh really?

Nelson: Yes, we are running now one of these job corps camps in Southern California. There is no comparison between the youth we are getting in this camp and the CCC enrollees of the thirties. This may not be a fair comparison; for in the recent operation we were going after school dropouts in large part, while in the CCC program we reached many segments of society.

Fry: Were your boys from the metropolitan areas in the thirties?

Nelson: Yes, our boys came from every place. We had them from Chicago, Toledo, Detroit, and the back woods of Missouri, Kentucky, and California. They were a cross section of the youth of that day. We had our problems. The kids from the big cities in the East started the same kind of protection rackets that the Chicago gangsters had done in the cities during the '20s. Many boys had to pay the gang leaders or they would get beaten, robbed, etc. We had some of that in our "dropout" camp in Southern California. Personnel problems and discipline was very difficult in those camps, for no enrollee dared squeal on the gangs. This type of discipline was the army's responsibility; but to be effective, our camp superintendent and his staff had to help. The incorrigibles were discharged, but many straightened up and finished their six months' enrollment.

I run into former CCC enrollees frequently--men in professions and business who are proud of the fact that they spent a hitch in

Nelson: the CCC camps during the Depression days. In fact, my barber operated the switchboard in my office on the Tahoe Forest when he was an enrollee from Wisconsin. The training and experience that they got at that time helped many when they joined the army or navy during World War II. Many made careers for themselves in the Division of Forestry, the Forest Service, the Park Service, and other agencies.

The Job Corps Today

I started to mention the difference between today's and those boys. Mostly the kids in those days, except those from the metropolitan areas, were rurally oriented. They had been used to work; they seemed to want to work. There weren't any relief programs that would take care of them if they didn't work. They were just glad to get somewhere where they had something constructive to do and they had good food and a place to live. I think the philosophy and the frustrations that go with today's social and economic situation has created a whole different type of generation. It's rather hard to pinpoint, but I can feel it. We had problems, yes, but they were not insurmountable.

California set a prototype for the job corps camps. We established two years before the federal job corps started; we set up a youth camp in Riverside County. We hired teachers through the Riverside superintendent of schools. We gave credits for high school and we had dropouts who earned their high school diplomas as a result of studying and working in that camp. In the CCC camps we worked them regular hours with very little time off for schooling. The philosophy today is reversed; we devote more time to schooling and less to work.

I think a basic fundamental of life is to learn how to do an honest day's work. You may not do it as a career, but you learn something in the process. I think our philosophy has changed, and I can't say that I like it. Maybe I was just born too soon. But I feel that I have seen better days. There was the dignity of accomplishment and the satisfaction that went with work; that doesn't seem to be as widely inspired in many of our present-day kids. It is dangerous to speak in generalities, for it is those kids that we read about. The ones who are motivated and doing something for themselves don't make the headlines; they, I hope, are still in the majority. The headliners today are a different cut than they were in the thirties. There seem to be fewer opportunities for many, and there is greater permissiveness and more frustrations among the young people. I can understand some of their frustrations.

Nelson: We are now trying to work on some programs to recruit some of our seasonal fire fighters out of the poverty programs. Lord knows, some of those kids need help. We are hoping to give them some opportunities which we hope they will take advantage of.

Fry: Would this be the Watts area?

Nelson: Watts and similar areas; we have problems in Berkeley, Oakland, Marin, San Francisco; we even have it in the smaller communities. It is not limited to the poor and minority groups, either. There are no simple answers.

Fry: Now we have poverty in the midst of plenty, and back there, everybody was poverty-stricken.

Nelson: Yes, that's right. That's a very important point. Everybody was on a pretty common level at that time; today we have the extremes. We have more ghettos than we had at that time. Now we have a much higher percentage of our population living in urban areas, and the opportunities for jobs are scarce. So what do they do? What can they do?

Improving Fire Fighting Techniques

I think, before we leave the Shasta, I should mention some experimental work we did with fire fighting equipment. We had one man who was in charge of our road construction, an old-timer by the name of Frank Myers. He was sort of a mechanical genius. Bulldozers were just coming into being then. Frank did a lot in testing and working with the companies in developing bulldozers so that they could take the rough going in fire fighting. We were just getting started with the use of machinery in fire fighting. We had only one tank truck on the Shasta in those days; it was a big old Budda with a 750-gallon tank of water and a pump.

I had one experience in 1931. We had a railroad fire start off of the horseshoe curve above Shasta Springs--an early spring fire with a heavy wind behind it. There was a road in front of it which had high brush on both sides; it was just an open top tunnel of brush. The fire was racing up towards this road. A little Mexican, off the railroad section crew, and myself were on the hose nozzle, trying to stop this fire at the road. The fire jumped the road behind us, between us and the fire truck. They pulled the truck and the hose line away from us; so there we were trapped in the fire and no place to go, for it had also jumped the road in front of us. As the fire consumed the high brush, its intense heat would diminish in that spot and we would move into that area. We were in there about two

Nelson: hours, and everybody thought we were goners. While we were lying in the road, a little rabbit with all the fur singed off of him came up and crouched down beside us and stayed with us until we were able to get out. The next day I doubled my life insurance.

We also did a little experimenting with aircraft. Fred Funke, out of the regional office, came to the forest and we tried to do some water bombing on fires.

Fry: Where had he gotten that idea?

Nelson: Well, it had been talked about, and Fred was one of those guys who would pick up any idea and see what he could do with it. We got an open cockpit airplane and tried to develop various types of containers that we could throw out with water on small fires, but we didn't have any success. It was twenty years before chemical bombing of fires was perfected.

That was also the beginning of weather forecasting on going fires. A chap by the name of Leslie G. Gray from the U.S. Weather Bureau was the pioneer in this field. He had put together a mobile unit which he brought to the fire. He would then predict the local relative humidities, temperatures, wind directions and velocities for the fire area. It was micro weather forecasting. He was the pioneer in that, and we were working with him. We now have a sophisticated "fire weather warning system" which provides local fire weather forecasts for the entire state. We need more accuracy in long-range forecasting.

It was also during that period that the Forest Service really got into research work on the problems of fire control. The Forest and Range Experiment Station established a field office in Mt. Shasta. George Gowen, with whom I served on the Trinity, took charge of this program. It was a three-man team: Gowen, Jack Curry, and A. A. Brown. For starters, they initiated research in the detection of fires--the proper placement of lookouts, and studies in fire behavior such as the rate of spread under various fuel and weather conditions. Of course, Bevier Show and Ed Kotok prior to that time had also done a great deal of work and study in this field. But they did it with very limited resources. It was under Ed Kotok as director of the Forest and Range Experiment Station that this type of work was started.

In the thirties, with CCC manpower and under the leadership of Ed Kotok, they established the San Dimas watershed experiment station in Southern California, and the Forest Genetics Laboratory near Placerville. With Ed Kotok as director of the experiment station and Bevier Show as Regional Forester, we had strong leadership in research, administration, and development. They were both men of imagination and ideas; we in the field did our best to carry them out.

Fry: Did this result right away in more lookout stations?

Nelson: Yes.

Fry: And better detection?

Nelson: Yes indeed, much better detection. With the CCC program, we had money to build the new stations, to build the new lookouts, and telephone lines. One of the first jobs that George Gowen and his crew did was to develop the technique of selecting the best combination of peaks to provide the most direct visibility to areas of critical fire incidence.

Fry: This fire detection, then, was really your point of progress at that time.

Nelson: Yes, to a large extent.

Fry: Not so much your fire fighting methods, but--

Nelson: Not so much. We were still doing that the hard way. Except that bulldozers were slowly coming in. But we had poor mobility for them. We didn't have the big transport trucks to haul them on, and it was a pretty slow process to move them on their own power. We also initiated a program of fire patrol in critical areas, particularly up and down the Sacramento Canyon, where we had so many incendiary fires.

Fry: Where were you able to get the additional patrolmen needed for this?

Nelson: Well, Mr. Show worked that out through the budget processes.

We had quite a bit of incendiarism in those days. The Indians were the cause of much of it. I remember there was one old Indian in Lamoine who we were getting pretty close to apprehending. We knew who was doing it, but we couldn't get the evidence to prove it. He sent the word out that if Les Solaro, our ranger, and Swede Nelson got any closer to him, he was going to shoot Nelson and gut-shoot Solaro. [Laughter] We settled that right away quick. About six o'clock of the evening I heard about that, I walked into his camp and called his bluff. He didn't do anything about it, but it cooled him off.

Fry: You didn't even check to make sure he didn't have his gun on you then?

Nelson: No. I didn't have any either, but I figured the best way was to go and find out. But, you know, as I look back on it, they had families, no work, and practically no food. They were practically

Nelson: at their wits' end. I have often wondered, if I had it to do over, if I could have improved on our approach to the problem. It was largely a social problem. If I had been in his shoes, I would probably set fire too.

Fry: The Indians weren't included on the CCC, or--

Nelson: Yes, they were; quite a few of them were. In fact, there was a special program for them on the reservations. I don't know why he wasn't involved in one of the relief programs.

Fry: Did you have much to do with timber management and sales, then?

Nelson: We had a timber manager by the name of B. C. Goldsmith, with whom I worked later on the Tahoe National Forest and later in the Division of Forestry. Mr. Goldsmith handled all timber sales business. We had quite a few of them at that time, with the Weed Lumber Company, the McCloud River Lumber Company, and the Elkins Lumber Company. (Elkins was cutting incense cedar only for making pencils.) In addition to handling timber sales, Goldsmith handled land purchases and land exchanges. Some of the timber companies couldn't pay the taxes; so they would trade their cut-over land for stumpage. He made some awfully good buys. In fact, he acquired some cut-over lands in which the timber companies had not cut the incense cedar, which he in turn sold to the Elkins mill for pencil stock. In many cases, the cedar sales returned to the U.S. Treasury as much or more than the land cost, and he still had the growing stock on the land. Land purchases and land exchanges during the Depression period made it possible to consolidate Forest Service ownership in many areas where management was complicated by intermingled private ownership. Some exchanges helped consolidate private holdings also.

The McCloud River Lumber Company, just on the southeast side of Mount Shasta, had large holdings of land and timber as well as timber cutting rights on large parcels of the Red River Lumber Company lands.

Fry: Were they exchanging stocks?

Nelson: They were doing some of that, yes.

Fry: But would you say that most of this was being done by the smaller companies?

Nelson: No, the larger companies.

Fry: The larger ones?

Nelson: Yes. We picked up some small ownerships too, but the larger

Nelson: companies were the ones who were really hard pressed with the tax burden. They were just delighted to get rid of their cut-over land and get out from under the taxes.

Fry: I was going to ask you about something different--creation of Castle Craigs State Park, in 1934. Were you involved in that?

Nelson: No, I was not involved in that. That was under the State Division of Beaches and Parks.

Managing the Forests

Fry: Did you have any problems with insects or disease?

Nelson: Oh yes. We had a bad bark beetle infestation, particularly on the east side, in the Fall River Mills country, and on over into the Modoc National Forest. On this job we used several CCC camps.

Fry: How did you go about this?

Nelson: Well, the control process finishes the tree. You have to cut the tree down, peel the bark off, and burn the bark in order to kill the insect larvae. That's the only way you can reduce the population and check the epidemic condition. This, of course, had to be done while the larvae were still in the tree, which was winter and spring. Also we were doing some timber stand improvement work, thinning in heavy second growth areas. At that time also Mud Creek, flowing from the glacier on the east side of Mt. Shasta, was producing a tremendous silt load in the McCloud River. We located a CCC camp on the McCloud flats for the purpose of harnessing the mud and rock flow. The mud was so thick it would float large rocks. The engineers designed a settlement basin and spreading grounds for settling out some of the debris. However, the ash and fine silt that came down off the mountain remained in suspension. It would go on to the river in spite of everything. (Interesting, our camp superintendent was named Spears and the company commander was named Sword.) [Laughter] They got along very well.)

Fry: Did this silt which poured into the McCloud River present a flood problem for the farmers?

Nelson: It presented a pollution problem. The fine material was held in suspension and clogged the gills of the fish and destroyed an excellent fishery for several years.

Fry: It was a wildlife problem, then, rather than one of rising water level.

Nelson: Yes, that's right. I don't know whether it is still a problem or not. I haven't heard of it for years; so apparently it isn't. It was during this time too that skiing was just becoming popular. We had a Shasta Snowman's ski club, and we developed a ski jump hill on the McCloud summit and held annual ski jumping competitions. This was the beginning of winter sports in that area.

Fry: You mean in all of California this was just the first?

Nelson: No, I'm sure not. Skiing was just beginning in a number of places, but this was the first in the Shasta area.

Fry: Oh, I didn't know that.

Nelson: That was some of the earliest winter sports activities. Of course, it was going on elsewhere. In the late '30s I got involved in ski developments in the Donner Summit area of the Tahoe Forest. We got involved in most everything, some of it official, some of it community-wide, and some of it a combination.

Fry: You did have a great deal of freedom to go ahead and try new things?

Nelson: Quite a bit, yes, one way or the other. Of course, a lot of this was just part of a civic program that we did on our own time, working with the ski promotion and one thing and another. Sadiebelle and I always became an integral part of the community in which we lived.

Fry: Did you have anything to do with any men's clubs or anything? By the way, were you living in Redding?

Nelson: No, we were living in Mt. Shasta City. No, I worked closely with the Chamber of Commerce. While we were on the Trinity, in the late '20s the Shasta-Cascade Wonderland Association was created. I participated in that promotion quite a bit.

Fry: Did you have to make speeches?

Nelson: Oh, not so many speeches, but I worked closely with Tom Stanley, who was the Wonderland's executive officer, headquartered at Redding. We worked together trying to promote recreation development and recreation use in the northern part of the state.

Fry: That at that time was considered to be a definite advantage for the mountain communities there?

Nelson: Oh yes, it was. I did it in an official capacity.

Fry: Your work there with the Chamber of Commerce involved their conservation committee or just the local matters?

Nelson: Everything--the mill run of Chamber activities.

Fry: Was there anything else you'd like to put in about the Shasta?

Nelson: Yes. We must go back to the Trinity for a short time.

RETURN TO TRINITY, 1934

Nelson: In the spring of 1934, Mr. Barnum, who was then supervisor of the Trinity, was moved to the regional office to head up the land exchange and acquisition program. So they sent me back to Weaverville as acting supervisor. That was in April of 1934. In August the Shasta had a rash of lightning fires. One very bad one was on the lower and southern slopes of Mt. Shasta. The fire was in a mixture of heavy timber and brush in very rugged terrain. Supervisor John Everitt had taken charge of this fire. In late afternoon he started to scout the leading edge of the fire to learn how and where he could build his control lines.

Well, he never came back. He was trapped and burned to death. That was August 25, 1934. The next morning, about four o'clock, I was called and told to go back to the Shasta and take over. When I got there, I found thirteen major fires were out of control, the supervisor was dead, and the morale was certainly at low ebb. We had our hands full for a few days.

Fry: What did you do? How did you orient yourself quickly enough?

Nelson: Well, I knew the country, I knew the people, and we had a lot of very fine men in the service and a lot of very fine cooperators, ranchers, and timber companies. Everybody pitched in and we finally got on top of the situation.

Fry: This was in 1934; so you were still using most hand tools for digging fire lines?

Nelson: Yes, it was still doing it pretty much the hard way, yes. The railroad companies--I remember one fire. The section crews are interesting crews to work with. They were Mexicans. They're a close-knit group. They won't understand what you say or what you tell them; but if you tell them through their foreman, they'll do what you want them to do. We had a tough piece of fireline to put in one night, and we just had to have it in by daylight the next morning. I told the foreman, "If you and your men will put that fireline to a certain place by daylight in the morning, I'll have

Nelson: a truckload of watermelons there to meet you." They got the line through and I had the watermelons there to meet them. [Laughter] The little incentives here and there help. But when you promise something, you want to be sure you deliver it.

Fry: Yes, I was hoping you didn't have to send clear down to Southern California to get your watermelons.

Nelson: It was watermelon season, and they like watermelons.

I think that probably winds up the Shasta-Trinity period pretty well--except in later years, a highway was constructed up the southwest shoulder of Mt. Shasta to an excellent winter sports area at about 8000 feet in elevation. The highway is known as the John Everett Memorial Highway. It serves the Shasta Ski Bowl.

SAN BERNARDINO NATIONAL FOREST AND FLOOD CONTROL, 1935

Fry: Now, you said you want to start with going to San Bernardino.

Nelson: This will be my first stop. In February of 1935, the Regional Forester, Bevier Show (he always signed his name as S. B. Show) offered me a transfer from the Shasta National Forest to the San Bernardino National Forest, as supervisor. This was probably the most delightful and complete geographical and climatic move that we had because we left Mt. Shasta in March, with about six feet of snow on the ground, and moved to San Bernardino with the orange blossoms in full bloom. It was just delightful in the valley. But they still had in the San Bernardino mountains a heavy snowpack. We moved from a little mountain community house to a lovely Spanish type home.

This proved to be a very interesting and rewarding experience, not only geographically, but duty-wise. As I recall, there were sixteen CCC camps on the forest at that time. Our major projects were building access roads into some of the more remote areas, constructing firebreaks on the ridges from the valley to the top of the mountains in the brush-covered watersheds, and water spreading grounds on the lower slopes in order to percolate the water into the underground basins. Not only were we using CCC enrollees; we were using WPA, SRA [State Relief Administration], and every other type of Depression period employment program that was available.

The firebreaks frequently proved to be of tremendous value in helping contain fires at relatively small areas. This was demonstrated in August of that year, 1935, when we had a fire start at the foot of the mountain, at the head of Euclid Avenue, which runs from Ontario into the San Antonio Canyon, separating the San Bernardino from the Angeles National Forest. The firebreaks provided not only access for men and equipment, but also control lines from which to work. This fire was confined to about three hundred acres. If it had not been for the firebreaks, it would have been much larger. It was in a very critical watershed location. And realizing that if we got high intensity rainstorms during the coming winter, the run-off and mud flow damage from this burned off area could be very

DeWitt Nelson, Supervisor
of the San Bernardino
National Forest (1940)

Nelson: disastrous, we immediately initiated a project to build a debris catchment basin at the mouth of the canyon. Even though it was a rather small drainage area, heavy rains could move a tremendous amount of soil and debris from the burned area to highly developed citrus groves and homes.

Fry: Were you able to do this with your CCC?

Nelson: This was done in part with the CCC labor and in part with contract labor. We immediately got the engineering staff to design the land fill type dam and the necessary spillway, in order to get rid of the excess water that would naturally flow, because the reservoir would be of limited capacity.

The debris basin construction job was started as quickly as it could be designed and materials secured. However, we were not fast enough. We got the debris dam about three-quarters built, but the spillway was still unfinished when we got a short but high intensity storm; of course, the dam that we had constructed captured much of the silt and then overflowed and burst. Having no spillway, it took all the debris and the dam with it. Damage to the orange and lemon groves and some of the homes was very heavy. That shows how important the brush cover is on these hillsides and how important it is to be able to control the run-off in the event we lose some of the cover.

Fry: What was public reaction to this? I can see how a misunderstanding could have occurred and a lot of blame heaped on the Forest Service.

Nelson: Well, there wasn't, fortunately. We had worked very closely with the county flood control organization, and they helped in the design of the dam and spillway. It was accepted as one of those acts of God that brought an unusually early and heavy storm to that area. Fortunately, there wasn't very much adverse criticism, but it did emphasize the importance of protecting the watersheds from fire.

Fry: Could you put this into perspective for me? Was this a common practice at that time, to build the catch basins?

Nelson: No, it wasn't. In fact, that was one of the first; as a result, it was too bad it didn't work. However, I still hear references to that as pointing up the need for immediate action following denudation of the watershed. So it was a good example as well as being an unfortunate experience.

Fry: Along with this, was there some attempt to replace the vegetative cover?

Nelson: Yes, we reseeded the area also, but the heavy rain came before the seed had even sprouted.

Fry: But nature beat you to it.

Nelson: Nature beat us to it.

SAN FRANCISCO: ADMINISTRATOR FOR THE CCC

Liaison With Army

Nelson: Here's another interesting thing: I missed the flood which occurred, as I recall, in November. In October, I again got word from Regional Forester S. B. Show that he wanted to see me in San Francisco immediately. So I immediately took the Lark [train] out of Los Angeles to San Francisco and arrived in his office the next morning, only to learn that Chester Morse, who had been the technical services liaison officer for the 9th Corps Area Military Command Headquarters at Presidio, San Francisco, was being transferred to the regional office as the Assistant Regional Forester in charge of lands. Mr. Show wanted me to report to the Presidio of San Francisco immediately to take over the liaison officer position. The liaison officer represented all the technical services of the CCC program to the military, for the Corps Area, which covered ten of the western states.

So our delightful living experience in San Bernardino was cut very short, and we moved immediately to San Francisco. This was again a very rewarding experience, and one which I thoroughly enjoyed.

Fry: Mr. Nelson, other people that I've interviewed have told me that a few men whom Mr. Show more or less had his eyes on--bright young men--were transferred around quite rapidly like this, in order for men to gain experience, because he felt that they would be more valuable higher up. What did this do to your settled family life, and were you able to say yes or no to these moves, or did you understand at the time this was more or less a building process in your own career?

Nelson: Well, I assumed it was a building process in my own career, and I never once turned down an opportunity to go someplace else.

Fry: You mean you were always glad to get out of a town?

Nelson: It was a discretionary thing. I could have said no, but it looked like an interesting assignment and an opportunity to improve my knowledge and experience.

Fry: Each one was a great change?

Nelson: Yes, they proved to be. As far as family was concerned, Mrs. Nelson lived by the same philosophy as I did and took it in stride. We enjoyed wherever we lived, entered into the life of the community, and I think enriched our lives accordingly. So, we always looked on it as an opportunity. We always lost money when we moved, because even though we got our actual moving expenses, we always had to dispose of a lot of things and buy a lot of new things as we went from one place to another. This was October, 1935, the middle of the Depression. We rented an apartment in the Marina district, which was very nice, but at $80 rent, it seemed very expensive. As we look back on it, it was worth it.

I reported to the Presidio as liaison officer to the chief of staff. The chief of staff was Colonel Ben Lear, who later became General Ben Lear during World War II, and a general of considerable note. Another man with whom I shared office was Major Arthur McCrystal. He was a wonderful chap, a very dynamic personality, and he ran a good organization into which I seemed to fit quite comfortably. So we got along very nicely. It was a new experience because I was representing all the technical services and trying to get the military to recognize the work needs while the military were more concerned with housekeeping problems.

I had a few interesting experiences. I might recount one or two of them. Chet Morse, who preceded me, had always stayed right at headquarters. Well, I figured if I was going to represent the technical services, I should get out and see what they were doing and what their needs were. In November, I arranged a trip to Oregon, Washington, Idaho, and Montana, where I contacted representatives of the various technical services, visited a number of camps, found out what their programs were and how their relationships with the military components were. Generally speaking, it was pretty good. Once in a while we'd run into a problem of personality frictions between the technical representatives and the military.

Fry: This would be the camp commanders and the camp superintendents?

Nelson: Yes, that's where it usually lay. So then we tried to figure ways that we could improve it.

On this trip (this was in November; winter was coming; parts of the country were already under snow) I visited a Soil Conservation Service camp out in Pocatello, Idaho. The soil conservation

Nelson: man for the state of Idaho at that time was a man by the name of Mr. Middleton. At this camp, I found it had been in there for nearly six months and they hadn't done one single bit of work on any projects. They hadn't gotten their projects approved out of the Washington office, and consequently they were just working around camp. The morale in the camp was not good because men in the field want to do something constructive, and the enrollees were unhappy for lack of activity.

Coming from an operating unit, this didn't set well with me either; so I immediately took it up with Mr. Middleton. He wasn't at the camp, so I had to handle it by correspondence when I got back to Presidio headquarters. I wrote him what I thought was a diplomatic letter and pointed out that this camp had been in being for about six months and no work projects were organized or planned or accomplished. I wrote him a letter and urged him to see if he couldn't improve the situation.

Well, I soon found out that I was not a part of the administration or policy-recommending body of the Soil Conservation Service because he immediately sent my communication to Mr. Fred Morrell, who was the national technical services representative or liaison officer in Washington, D. C. He objected to my intruding into the administrative affairs. I got a three page single-spaced letter from Mr. Morrell telling me it was none of my damn business how the camp was running, just give them what service they asked for. My job was strictly a staff job and not an operative job. That particular instance kind of discouraged me, for I had always been a "line officer" with authority and responsibility to get things done.

Fry: This was at a time when Soil Conservation Service was getting started?

Nelson: Yes, just getting started.

Fry: And it was in the Department of Agriculture but not in the Forest Service, right?

Nelson: Correct. It was a separate service in the Department of Agriculture.

Fry: But nevertheless, it was officially included in your problem, although maybe not recognized.

Nelson: I was a service officer and not an administrative officer. At least they didn't want my interference into their operations. But, it had its effect anyway; they soon got some projects going, and that was all that concerned me.

The CCC enrollees were recruited for a six month duty. They could reenroll for one more six month period. I've forgotten just what period; it seems like we moved them in December and January,

Nelson: and June and July. Since they were recruited from all over the country, we had a big job of arranging troop trains for moving these boys back to their home base or point of recruitment. At the same time we had troop trains bringing new recruits from various railheads to refill the camps throughout the ten western states. It was quite a problem in logistics.

Fry: And you had this as a coordinating problem?

Nelson: I participated in it with the military, yes. At that time--and there again, memory is rather dim--it seems like we had some three hundred CCC camps scattered over the West: In the National Park Service, the Forest Service, the Soil Conservation Service, the Indian Service, and of course, each of the western states had some of these camps. We had quite a few people to work with. Also at that time we were trying to get an educational program going in the CCC camps. And, of course, this was a point of conflict in many areas.

Fry: With whom?

Nelson: Between the educational directors in the camps and the work program people, because they were both vying for the time of the enrollees, each thinking he should have all the time of the boys for their respective projects. We had problems of properly balancing the educational program with the work program. The degree of success depended largely on the willingness of the educators and camp superintendents to work together in scheduling classroom and work periods.

Fry: Where were some of your better camps?

Nelson: Oh, I don't remember. Most of them were good camps. We had problems. We had one instance of a very serious situation at a camp in Idaho where the personalities of the company commander and the project superintendent became impossible and we had a rather difficult disciplinary case there, on both the military and the technical services side. That was, I think, the toughest problem we had. Those kind of problems are always difficult.

Fry: And there was no way of handling those, I guess.

Nelson: There's no simple way to handle them. You just have to delve in and do a tremendous amount of research and dig up where the problems are. In this case, both were guilty to a certain extent; so we had to work out a solution for both sides and get a clean slate for top management in the camp.

Fry: You transferred these out and got new ones?

Nelson: As I recall, one had to be discharged and the other was transferred.

Fry: I was wondering if you were fairly free to handle personnel problems or if you found you had to be politically aware of what you were doing.

Nelson: We worked together on this, and the army handled their side and the technical service handled theirs. They each had their respective responsibilities and jurisdictions. In this particular case, both the military and I had to move in because the two local levels, in both the military and the technical service, had gotten themselves crossways.

Fry: What about political influence being brought to bear on the higher technical jobs in CCC? Did you come under that?

Nelson: In the technical services, like camp superintendent and foreman, particularly, where it didn't depend on particular skills, we had to be cleared through the local democratic committee. We didn't have any real problems here, to my knowledge. I didn't, anyway, and talking with many men in the service area, I have heard of very few. The local committees were cooperative; everybody needed work and they usually endorsed the men that were proposed to them. Once in a while you'd run into the situation where two men were proposed for the same job. Then, of course, the man who was on the right side of the aisle, as it were, got the benefit of the nod. But we had very little trouble with it. It could have been very bad, but because of the nature of the local people--and I had personal experience with this on the Shasta Forest, the Trinity Forest, the San Bernardino Forest, and the Tahoe Forest--I never ran into a very difficult situation. So I think that was a pretty good cross section.

Fry: And you didn't notice any difference in various states?

Nelson: None came to my attention, no.

Relationship Between Forest Service and Army

Fry: Let's see, your functions were primarily concerned with operations?

Nelson: Yes, the relationships between the technical services and the army.

Fry: I was wondering if you could give us some of the major differences in outlook between the army and the Forest Service. Was the army, for instance, more concerned with things like purity of water and

Fry: getting snowed in by winter storms--things like this which the Forest Service always took as a not too necessary requirement for survival and on which the army might have had a different point of view?

Nelson: There was a certain amount of this. The military, by their nature and their training, were concerned with the welfare of the individuals. And here again, it depended a great deal upon the attitude and experience of the company commander. Some of them were out of the city; they were reserve officers, they had never been on this kind of duty, and they were rather lost in the woods, as it were. So they ran, as much as they could, a paper type organization, tending to the housekeeping and the welfare; they were very interested in keeping a neat and tidy camp so it would pass inspection. I guess that type would be in the minority; we had a lot of excellent commanders who were as anxious to do a good job as anyone.

Fry: That was rather strange and unknown to the Forest Service, wasn't it?

Nelson: Well, it was a secondary thing. We too were concerned with the welfare of our men, but we also expected them to have some ability to take care of themselves. Here we'd gotten a bunch of green kids out of every place across the country. Some of them were very green; others were not--kids from the farms and the hill country could pretty well take care of themselves. Oh, we had every type of example.

Ha! I remember one instance. This is up on the Tahoe National Forest. One cold winter morning I opened the door by one of the trucks that a boy from Missouri was driving, and I looked in. He was driving the truck on this cold winter morning barefoot. I said, "What in the world are you barefooted for in this kind of weather? Why don't you put your shoes on?" His answer was, "Me and Pappy always drive barefooted!" So, we had all types of kids, some very resourceful, some not. And of course, those who couldn't take it were released and sent home.

Fry: By this time, in CCC, did you have formulas set up for such things as man hours per month in certain camps that would be relegated to the CCC work projects, and hours that would be relegated to the army housekeeping chores?

Nelson: Oh yes, we worked that out pretty cearly in the game.

Fry: So that you worked with these formulas.

Nelson: Yes, pretty largely.

Fry: Did you develop more, or use these very much?

Nelson: We didn't change them much by that time; but we always found variations in every camp, depending upon the strength and weaknesses of the company commander as opposed to the project superintendent. As I recall, I think we figured about twenty-three men to run the camp, the kitchen and office clerical work and everything else, and the rest of the boys were supposed to be out on the job. We worked them eight hours a day, five days a week.

Fry: Were all your camps about the same size?

Nelson: The standard strength was two hundred men. I remember, during the period we were building the camps with the enrollees and a few artisans, the cost of materials and labor ran from $35,000 to $40,000. When we were building our conservation camps (for prison and CYA inmates and wards) in the 1960s, for eighty men the costs ran about $500,000.

Fry: That's more difference, then, than just in inflation?

Nelson: Yes, indeed. They are built to much higher standards as permanent type camps. We put in all the necessary sanitary facilities; we built warehouses and shops; institutional type kitchen and dining ware; we provided beds with mattresses and springs, rather than just canvas cots. These camps were built by contract and not inmate labor. You see, when the CCC camp program was first started, it was scheduled to last six months. The buildings were built on pedestals; we used pit toilets for minimum sanitation. Today our standards are so much higher. The camps are permanent in nature and requirements health-wise; even the amount of cubic airspace per man is a standard today, whereas in the 1930s we didn't pay any attention to it. We had double banks in many of the barracks.

We weren't paying much attention to building standards at that time; we were concerned with getting the boys off the streets and out where they could do something constructive. There was a job to do and we did it with a minimum of fuss and feathers. As a result, many of the men in our own organization here--the State Division of Forestry, the Forest Service, the State and National Park Services--originally started as enrollees in the CCC program. They usually turned out pretty well. I still run across men, professional men and all kinds, that are proud of the fact that they started out as enrollees in a CCC camp. It was a starting point in the lives of many men.

Fry: How did you feel that this educational program worked out?

Nelson: Well, it was a rather crude type of program, at first. We tried to give them some reading, writing, and arithmetic, and interest them in good reading. We enlisted and got the help of the local schools; in fact, we were able to pay the local teachers for part-time duty in many of the camps. Of course, we also carried on religious programs, using the local ministers of all faiths that were available.

Fry: This was for your Sunday morning service?

Nelson: Yes. And of course, we provided the boys with some recreational outlets. We'd bring them into the nearby towns for the shows and some places for dances. We had intramural baseball, basketball, when the season and facilities made it possible. We had to have that in order to keep the morale up, wear off some of the energy.

Fry: What about your spike camps? Did they present a problem in keeping up morale? Because they were more remote?

Nelson: Yes, they were often a problem. At the same time, they were an asset too because they ran on more of a cooperative basis. They didn't have the rigid disciplinary routine of the base camp. As a rule, they became pretty close-knit groups and most of them liked it. If they didn't like it, they soon found their way back to the main camp, and there was always someone to take their place out there in the back woods. Of course, we had a pretty good corps of engineers who were assigned to the various camps. They did the location work on all roads and trails; at that time, it wasn't so difficult to get rights-of-way over other people's lands because land wasn't as valuable as it is today. Today it is very difficult to get rights-of-way over private lands because of the cloud that it frequently places on the title.

Fry: Was this under you, obtaining right-of-way?

Nelson: No, that would be under each of the technical services.

Accomplishments of the CCC

Each of the technical services were responsible for their own programs. Budgets were quite generous for equipment and materials as well as for the skilled manpower necessary to do the job. For example, each forest had engineers for road location and other essential survey work. We could hire needed carpenters, plumbers, electricians, etc. The California region had two architects who designed our major buildings such as houses, offices, warehouses, and other structural facilities. The State Division of Forestry

Nelson: used the same designs. This not only provided work for the enrollees, but we were able to employ local skilled artisans who also needed the work badly. And it also did another thing; it provided an outlet for many commodities, such as lumber, roofing, cement, plumbing, electrical equipment, trucks, and things of that nature. So, it reached way back into the nation's economy. The two architects designed pretty standard type buildings, which were used region-wide.

While I was on the Shasta Forest, they--these two architects--were just getting started in the design, and I worked closely with them.

Fry: I was wondering if you found that architects were used in every state, or if there were some that didn't.

Nelson: Yes. One way or another, each of the agencies built many basic facilities, and many of those facilities are still in full use throughout the country. We also had a few recreation men who planned, designed, and laid out many campgrounds. This was really the beginning of the Forest Service campground program. If it hadn't been for the work of the CCC, we wouldn't have been able to handle the recreation demands of the '50s and '60s, for it was not until about the mid '50s that a reasonable amount of recreation budget was appropriated by Congress.

Fry: This takes a lot of planning. Were there plans made before CCC really hit? That you knew what you wanted?

Nelson: Yes. There were a good many plans. We had some forewarning after the crash in '29. The CCC program itself didn't start until '33. As the economy worsened, the Washington and the regional offices directed us to build plans for projects that we felt were essential on the forests.

For example, we had on the Shasta Forest nearly completed our lookout detection study before the CCC program was inaugurated. As a result, we knew where we wanted to build lookouts. As a result, we got all of our lookouts built during this period. This also applied in part to ranger headquarters construction, access road development, insect control, etc. Of course, more and better plans were developed as the CCC and other emergency programs came into being. This was true for all the technical services, for they had all anticipated the need and were ready to go with something.

Fry: You mean national parks and state parks?

Nelson: Yes.

Fry: Did you have anything to do with research that was sort of wiggled in under CCC?

Nelson: No. Ed Kotok, then director of the California Forest and Range Experiment Station, and S. B. Show were both very interested in research. And here, Eddy was on the ball, for he got the San Dimas watershed research facilities built and the Placerville Forest Genetics Institute constructed during this period.

Fry: Feather River, Black Mountain, and San Joaquin?

Nelson: Feather River was in being before that, but the facilities were enlarged. The Black Mountain and San Joaquin Range Experiment Station came during this period.

Personalities of the CCC Program

Fry: Are there any other people with whom you worked that you might want to comment on? For instance, did you do anything with then Major H. H. "Hap" Arnold who, for a while, was at March Field?

Nelson: I had very close contacts with Hap Arnold and got very well acquainted with him during my short period on the San Bernardino in 1935. In fact, we got to be rather close friends and had some delightful times together in later years. I was a guest in Hap's home in Sonoma County just a month before he died. I still correspond with Mrs. Hap Arnold. They were wonderful people. Let's see, I think Hap--yes, Hap Arnold had left March Field when I went back to the San Bernardino in 1940.

Fry: How did you think his operation compared with the others?

Nelson: He was tops. He liked young people. He was a humanitarian. He loved the outdoors. He was widely interested in the Forest Service activities, and he just went all the way. Of course, he had an indoctrination with the Forest Service, shortly after World War I. That was in the early twenties, when the Forest Service, in cooperation with the Air Corps, as it was called then, inaugurated an aerial fire patrol, and Hap Arnold headed it up. It was operated out of Mather Field and flew fire patrol throughout much of the Sierra country. Hap became a very close friend of many men in the Forest Service at that time.

Fry: Are there any others about whom you would like to comment? There were six district commanders, I believe, in all.

Nelson: I think there were, yes. Hah! I don't know whether I should tell this story or not, but it's an interesting tale. Colonel Ben Lear was a martinet of the first order. He was a grand guy to work with; I always enjoyed working with him, I guess because our relationships were always cordial. Colonel Lear bought himself, in the spring of 1936, a new Packard 120 automobile. And, of course, the first thing he wanted to do was to get that Packard out and try it. So he came in to me and said he thought we ought to make an inspection trip. I always liked to get in the field, so I went with him. We went up the Redwood Highway to district headquarters in Eureka.

Colonel Lear was an old cavalry officer. By reputation they were tough, and they ride rough wherever they go. He would start out very nice with the district commanders, but before he would get done with them, he would just tear them to shreds verbally. I hated to be in the room with him because of the way he would treat his subordinate officers. And then, when it was all over, it was all over and that was it.

Well, from Eureka we went along the coast to the mouth of the Smith River and up the Smith River into Oregon and visited a camp up there near the Oregon caves. We got in there in the middle afternoon, and the camp was empty except for the housekeeping crew. The company commander wasn't there; the camp superintendent wasn't there. They were all out doing something. The only man in camp was the company doctor, a military doctor. He had just finished setting a broken arm for one of the boys, who had gotten injured on the job. The doctor had plaster of Paris all over his hands. But the Colonel didn't give him a chance to wash that off or anything; he wanted to see the camp.

So we took a tour of the camp. And for the first time in my life, Colonel Lear became very complimentary and commended the doctor for everything in the camp. It was a nice camp. It was a spic and span outfit, and obviously everybody was out on the job working. We wound up in the mess hall, and here again everything was tip-top. Then it just seemed that the Colonel caught himself and realized what he had done. Looking around, he saw a fly in that mess hall, and he just tore that poor doctor to shreds, all over one fly in the mess hall. That was typical of Ben Lear. I enjoyed him. He was a delightful fellow to be with, but he certainly raised Cain with subordinates. That I didn't like. In my judgment it did more damage than good.

Fry: He didn't tear you apart?

Nelson: No, we never had any words at all. We discussed problems, and that was it. We got along fine. But see, I wasn't directly under his command; I guess that made a difference. No, we got along beautifully.

Above left: DeWitt Nelson, c. 1918.
Above right: DeWitt Nelson, Ames, Iowa, 1923.
Below: Flying air patrol on Shasta, 1932.
(Left to right: Pilot filling the gas tank, DeWitt Nelson, Charles Buck) Plane in use at that time was World War I DeHaviland.

DeWitt Nelson, Supervisor, Tahoe National Forest, c. 1938

Nelson: It was worked out, and in May of 1936, I left the Presidio and the CCC liaison officer duty and reported back to Nevada City, where I had served before as a timber scaler and a ranger, only this time back as supervisor of the Tahoe Forest. Here I came back to old friends; the ranger staff was pretty much as it had been when I left it nine years before. B. C. Goldsmith, who was on the Shasta with me, was then on the Tahoe Forest as land and timber salesman. Leland Smith was in charge of the grazing programs. It was like coming back home. We had always enjoyed the country and Nevada City. We still have many friends there.

We had some interesting experiences here, a few of which I might recount. We were still in the Depression period. The large timber land holders were still wanting to get rid of their cutover lands in order to get out from under the tax burden. One of our big programs was acquiring cutover lands that the timber companies wanted to get rid of; they couldn't carry the tax burden under the Depression conditions. So we acquired a tremendous acreage of cut-over lands.

I remember there was one piece of property which was in the hands of the bank receivership in Reno. This was a pretty good sized acreage in Dog Valley, which is a little bit northwest of Verdi. We worked out a transaction with them whereby we acquired those lands for 66¢ an acre. I never saw a man so happy in my life as that bank receiver was when he closed that deal, because he could get out from under it.

Fry: Well then, were you able to do something about that checkerboard pattern of ownership that existed?

Nelson: Yes, we did some. Mr. Goldsmith handled most of the land exchange and land acquisition work. We were able to pick up some scattered parcels. In 1936, Hobart Mills had pretty well cut out their timber holdings. They closed the mill that year, which was quite a blow to that part of the county. So, through a process of acquisition--I think in this case we were able to get purchase money under the provisions of the Weeks Law--we bought the cutover lands of the Hobart Estate Company. Here again, I have forgotten the acreage, but it was a pretty sizable block and very fine timber growing land. Due to shorter growing seasons, trees grow more slowly on the east side of the Sierras.

At that time the Hobart Estate Company had large holdings on the northeast shores of Lake Tahoe, generally in the area of Incline. The Tahoe Flume and Lumber Company had even larger holdings on the Nevada side of Lake Tahoe to the south of the Hobart holdings. They both wanted to dispose of their lands. The Forest Service was the only potential buyer at that time. But we had no authority to acquire

Nelson: lands under the statutes of Nevada. Consequently, I spent a good deal of the winter and spring months of 1937 in Carson City, getting enabling legislation through the Nevada legislature, which would authorize the Forest Service to acquire the Hobart Estate and the Tahoe Flume and Lumber Company lands.

Fry: Do you mean under the Weeks Act?

Nelson: Yes, the only money available was that under the provisions of the Weeks Law of 1911.

Most states require authority by legislative or executive action, before the federal government is authorized to acquire private lands. We have such legislation here in California. For many years the Forest Service had operated a very nice public campground at Incline. This is one of the nicest sandy beaches on the lake, sloping gently into the lake with good second-growth timber on the uplands. The Hobart Estate Company had permitted us to operate this public campground on Incline beach. Incidentally, if you are familiar with the timber in that area, it's all second-growth pine and fir. That country was all logged over, clean, during the Comstock mining days of Virginia City. Practically all of the lands on the east side of Lake Tahoe were, and even much on the west side of Lake Tahoe was logged during the early mining days. There was a railroad from Glenbrook to the pass. From there a V-shaped water flume carried the logs and lumber down to the valley floor on the Carson City side where it was used for mine timbers, building construction, and for fuel.

Fry: So that timber which Hobart Mills and Tahoe Flume and Lumber Company had cut out was all second-growth timber.

Nelson: It was all second-growth timber and, if you recall, it's pretty nice stuff. It was cut during the Comstock days of Virginia City.

Fry: But the Hobart Mills had been cutting in the thirties?

Nelson: That was in the Hobart Mills area, which is north of Truckee. Well, anyway, about the time it looked like we were going to be successful in getting the enabling legislation through the Nevada legislature, a man by the name of George Whittell from Redwood City came up to the lake and got interested in those same lands. We had just finally gotten our enabling legislation through the legislature, and George Whittell offered both Hobart and the Tahoe Land and Flume Company nice cash price and bought the whole works right out from under us. (In 1972 the Forest Service purchased 10,285.73 acres of those lands for $10,685,000. The enabling legislation was finally put to good use--for a price.) Today all that development at Incline Village is

Nelson: on those properties; the beach is privately owned with large apartment houses practically down to the sand strip. Other areas along the front of the lake are being developed the same way. The state of Nevada is in the process of buying a few thousand acres at a good many millions of dollars from Mr. Whittell. So that's the way the ball game gets played.

Fry: If you'd gotten that enabling legislation, all of that could be--

Nelson: All of that could be in public ownership today. It's hard to tell what is the highest and best use in some areas. But I'm sure at least part of it should have been in public ownership, particularly the shoreline. Of course, now all of these congested developed areas are contributing to the waste that's flowing into the lake which, if it is not taken care of very soon, will ruin that gem of the Sierra. The nitrates and phosphates from the waste waters will produce an algae growth that can't be stopped.

Fry: Was this ever a concern in the thirties when you were buying land?

Nelson: No, we didn't realize it. Of course, about the only gambling development that was really there was Cal-Neva. The Cal-Neva resort that straddles the state line right on State Line Point, with the dining room on the California side and the gambling casino on the Nevada side--this is the northeast corner of the lake. That was the only major gambling casino at that time. It burned on Easter Sunday; now I've forgotten which year, but I believe it was 1938. They immediately went to work on a round-the-clock basis and reconstructed it to its present conformation and had it ready for opening in June. The story goes--and I can't vouch for its accuracy--but the story goes that Mr. George Whittell lost $130,000 on the opening night of Cal-Neva after it had been rebuilt.

Fry: Presumably he was able to go ahead and eat and live quite comfortably.

Nelson: Yes, I think he did.

Fry: Did you have any fire administration problems this time around, at Tahoe?

Nelson: Yes, of course.

SALVAGING AND REFORESTING AFTER A FIRE

Nelson: Fire is always a problem in the forests of California. Our most disastrous fire during that period on the Tahoe occurred on October 16, 1936. We had one of those east winds off the Nevada desert; we call them the mono winds. It was blowing about ninety miles per hour. There was a sawmill on the forest hill divide that caught fire in the middle of the night. With the gale wind blowing it swept the fire down the ridge at about five miles a minute it seemed. The fire through the crowns of the trees was way ahead of the fire on the ground at times. That was the toughest fire that we had during my return visit to the Tahoe, between 1936 and 1940.

Fry: What techniques did you use, then? Do you remember enough about that particular time?

Nelson: Well, I remember that we got our men and equipment in there and we started working on the back end of the fire and the flanks (you couldn't work in front of it--it was running too fast). It ran for, as I recall, two days, in a long, narrow strip. By the time the wind let down the second evening, we had forces there; we had a line around it by daylight the next morning and had it controlled. It burned over some beautiful timber, some magnificent sugar pine and ponderosa pine. We made a salvage timber sale. I think this was one of the first salvage timber sales from fires of any consequence in the region. We sold the killed timber at a very nominal cost to the Setzer Forest Products Company of Sacramento. Again, we must remember that this was during the Depression, and it was a long haul for logs in those days. Even though they took only the high-grade material, they just about went bankrupt in the salvaging operation because of the poor market for lumber.

Fry: Oh, they didn't use it in their own plant?

Nelson: Yes, they sawed it in their own mill. But they had to sell the lumber to make it go, you see. The market was so poor at that time that they just about went bankrupt.

But we were able to salvage most of that high-grade timber and also, by that process, remove a lot of what would be a serious fire

Nelson: hazard left in the form of snags and downed trees. Immediately after the fire, we did another experimental job; it had been tried here and there, but we did it on a pretty large scale. It was what we called spot seeding. We put our CCC crews in there, and about every eight feet, they'd dig a little hole in the ashes and soil and drop in two or three sugar pine or ponderosa seeds, cover it over, pack it down and go on to the next spot. We had to poison the rodents even though the fire had cleaned out a lot of them. Winter rains were just around the corner, and the seeds came up beautifully. The only mistake we made was in putting too many seeds in each spot.

Fry: Then you had to thin them out?

Nelson: Yes, we had to do some thinning. But, of course, the strongest of the new seedlings would take over.

Fry: Were you able to run statistical records of these seeds?

Nelson: We did for a while, yes. And then when I left in '40, I lost track of it; I don't know what the final result was. But I've checked with others from time to time and they report that it proved to be very successful. There was a lot of ceanothus or what was referred to as deer brush, which comes in abundantly following a fire. In fact, it often captures the site, which precludes any trees from really taking hold successfully. So, with Leland Smith's leadership, we did some experimental work in grazing, trying to keep the ceanothus down to where it would not take the site over, before trees got established. We ran a number of tests in cooperation with the cattlemen in there on how his cattle did on the ceanothus browse. It proved to be quite a successful experiment, but we weren't able to keep up with the growth of the ceanothus.

Fry: Not even with the cattle?

Nelson: Not even with overstocking.

Fry: Well, was this idea of grazing to allow the seedlings to develop used elsewhere then?

Nelson: It's been used, yes. I don't think we were too original on that. Leland Smith, who was my range man, was progressive on that type of thing. He kept weight records on the cattle as well as growth records on the ceanothus and other shrubs.

Fry: In something like this--for instance, in your salvage sale, when you wanted to do something which wasn't really in the books, did you find it pretty easy to go ahead, from the standpoint of administrative procedures?

Nelson: Yes. Generally, yes. It was an emergency; if we didn't salvage that timber immediately, it would be lost completely because pine timber particularly blue-stains, which downgrades the lumber. So the regional office backed me all the way, very promptly, and helped in working out the details. It worked out very nicely.

Fry: Did you have experience with more than one regional forester?

Nelson: Well, I really can't say that I did. Mr. Show became Regional Forester in 1926. Reddington preceded him, and I had only met him; I was a little timber scaler and a ranger at that time. Show was part of the instrument that got me into state service in 1944. So most of my service in the Forest Service was really under the leadership of Bevier Show. He retired not too long after I went to the state.

Fry: I was just wondering if you had any comments to make about Mr. Show on whether you felt he was receptive to innovations?

Nelson: He was very receptive to innovation, it always seemed to me. Show had an imaginative mind of his own and he was research-minded. He was always trying to find some new approach to a problem; if you would come forth with what was a logical solution to something, he was very receptive to it.

Fry: So he was also receptive to ideas from other people.

Nelson: Oh yes. I always found him so. At the same time, he had a strong will and mind of his own. There wasn't anything wishy-washy about him; he was very strong minded. But we always got along well. There was only one thing we didn't agree on; he liked to drink a lot and I didn't. I refused to keep up with him in drinking. I think he admired me for it. I set my limit at two drinks, and that was it. [Laughter] That was the only place where we didn't seem to get along very well.

Fry: But this didn't interfere with your social life, did it?

Nelson: It didn't interfere at all, with either social or business life.

Fry: You'd go along with him, then?

Nelson: This would occur when we were on field trips, mostly. But I know a few fellows that went along with him and one or two of them to their own detriment; they went too far. That was Bevier's--I would say, in all fairness to Bevier, that was his greatest weakness in his later years. He liked to have his boys join him in the "children's hour," following the day's work. Yet he was a grand guy to be out in the field with. I went on trips with him in the desert country. He had a terrific breadth of knowledge, as well as interest.

Fry: You mean outside of natural science?

Nelson: Oh yes. He was a great ornithologist. He had collected bird skins from all over the country, or a lot of the West, anyway. That was just sort of a hobby of his.

Fry: Do you feel that he built up the fire prevention activities in the state?

Nelson: I think so. You see, he and Ed Kotok did the original work in fire research starting in about 1912, on the Shasta, as I recall. And then on through his--let's see, I think he was director of the experiment station before he became regional forester.

Fry: He wasn't director, but he was in research.

Nelson: He was in research, yes. And his primary interest in research was in the field of fire protection. Ed Kotok was appointed director of the experiment station in 1926, about the same time that Show was made regional forester.

Show gave me several breaks. The first as deputy supervisor of the Trinity in 1927. This was followed by subsequent advances to the Shasta, San Bernardino, CCC liaison officer, the Tahoe, and back to the San Bernardino National Forest.

In 1944, he endorsed my acceptance of deputy director, Department of Natural Resources, State of California, with the understanding that I would become the state forester when Merritt Pratt retired in the fall. In the spring of 1946 he offered me the position of assistant regional forester in charge of state and private forestry. In all fairness to my many obligations in the state, I turned down that opportunity to return to the Forest Service.

DEVELOPING WINTER SPORTS AT TAHOE

Fry: Do you have any further--

Nelson: Just one or two little things on the Tahoe. It was in the last half of the thirties that winter sports--skiing--began to become somewhat popular. Wendell Robie of the Auburn Lumber Company at Auburn was a leader in this. Wendell was a dynamic guy. Anything he went into, he went all the way. I worked with Wendell; with his help, and through the county and federal offices, we were successful in getting an S.R.A. camp built at the old Auburn ski hill just below Cisco on Highway 40 (now Highway 80). With that crew of men, we cleared and graded the Auburn ski hill. That was one of the first winter sports developments on Highway 40, soon to be followed by a development at Soda Springs, and shortly after that at the Sugar Bowl. The Auburn ski club sponsored some of the early day downhill races, slalom races, and ski jumping. In 1939 we opened the World's Fair on Treasure Island with ski jumps.

Fry: Now, tell me about that ski jump.

Nelson: Well, it was Wendell Robie's dynamic drive and leadership that prevailed on the people running the World's Fair exhibition. He got them to build a fourteen-story-high scaffolding on the Island for the take-off and the downhill run. Shaved ice was then blown on this and we had some famous Norwegians and Swedes to do the jumps. The weekend before the opening of the fair, we held the international downhill race off of Red Mountain; this is on the north side of Highway 80, near Cisco. Hans Schroll, who later developed the Sugarloaf resort, won this race. On the opening night of the World's Fair, it fell my lot to handle the recording at the top of the fourteen-story scaffolding. I think it was the coldest night I ever spent, because the wind was coming through the Golden Gate and it was just like ice up there. Unfortunately, I didn't have my mountain cold weather clothing with me. Anyway, it was an unusual way to open a World's Fair in San Francisco, and it was very successful, largely due to the driving force of Wendell Robie.

Along about this time too, the state of California was getting into the snow survey activities. We in the Forest Service

Nelson: cooperated with the State Department of Water Resources at that time in setting up snow survey areas and then periodically doing snow survey recordings in the winter months for the purpose of forecasting run-off. Dr. Church of the University of Nevada had perfected this technique at his experiment station on Mt. Rose, southwest of Reno. Since this gave us an official capacity in snow work and skiing, I initiated the first ski training school that was ever put on in the Forest Service so that our men would be a little bit more adept at working the surveys.

Fry: Could I ask if you enjoyed skiing?

Nelson: Oh, very much. I've given it up now. I'm no longer in condition for it. But, yes, I really enjoyed skiing.

Fry: In this training school, it was an in-service, short-term training?

Nelson: Yes, it was oriented to the rangers. We ran it for one week. We got one of the Norwegians up there on the hill who was a professional skier to give us the training so we could at least stand up on the skis and travel cross country on them with reasonable safety. I think, by and large, these are some of the highlights of our tour of duty on the Tahoe National Forest.

Fry: In the recreation development, did you have to have instant facilities that were concessions?

Nelson: We had a few concessions on Highway 40.

Fry: How did you manage them?

Nelson: In most instances they were there when I took over the forest, and they were some of the early day concessions and not of the highest standard, unfortunately. Since then, every one of those concessions has been wiped out by the new highway, along with a few of the campgrounds that we'd developed. I hated to see the campgrounds wiped out, but the concessions were no loss because of their poor standards. Those concessions were let out many years before the standards became what they should be. So the highway took care of that situation. Private developments on private land were much better.

Fry: It didn't go on and on like it has in the national parks?

Nelson: Not quite as badly.

Fry: Along about this time, the nationwide controversy was pretty hot over the advent of a federal regulation confiscating land.

Nelson: Oh yes, it was just beginning to brew. It was as we moved to the San Bernardino. I can get in a little more here about that, too. It was during this period that Secretary Ickes, Interior Department, was making a drive to take over the national forests. At the same time there was a drive to create the King-Sequoia National Park out of the national forest. I got in only on the fringes of this; I don't have much to report on it.

Fry: On either controversy?

Nelson: Not at that time. When we get into the proposed federal timber regulations, I can report more on that in the next four-year period. So I think we might as well now leave the Tahoe National Forest.

SUPERVISOR OF SAN BERNARDINO NATIONAL FOREST IN WARTIME

Fry: Where did you go from the Tahoe?

Nelson: Okay. In March of 1940, Mr. Show asked me to go back to the San Bernardino as supervisor, which I did happily, and sort of picked up where I had left off back in 1935. This time, the CCC camps were rapidly going out of existence. There was a threat of war, and the military was moving in. Camp Hahn, out of Riverside, was soon being built, as were other camps, and we were losing the CCC crews which had been the backbone of our fire protection organization. This was a real loss. There was a big demand for labor, so there weren't too many people available for fire fighting duty, and we didn't have the budgets to hire any large amount of people for standby fire crews. But we did work out pretty good cooperative agreements with the army units that were around the forested areas on which we had to rely for large numbers of men.

During the early part of that period we were using military for fire fighting when large numbers of men were needed. We always found that about 10 percent of those troopers had had experience in the CCC program, and from them we selected crew leaders for fire line construction. They knew what to do, and because of them we had very good success.

But as the war went along, that source of past- or ex-CCC boys in the military were soon gone to various places in the military and we lost their skill. The military became a less effective fire fighting force because we didn't have enough regular men in our organization to give them the type of leadership that they needed on the fire line. They still provided us with manpower, but most of the officer personnel, as well as the troops, didn't like to fight forest fires; so they became less and less effective. This was a handicapped period as far as manpower was concerned.

Let's see, Pearl Harbor was on December 7, 1941. A short time before this--I think I'm getting ahead of my story here. I should go back to 1940. We had one very serious fire in a side drainage of the Cajon Canyon on the San Bernardino. This fire denuded a large area in

Nelson: both the Cajon and Lytle Creek drainages. Flood and erosion from the burned area was a threat to both the railroad--that's the Santa Fe and Union Pacific railroad--as well as a serious flood threat to much of the lower part of the city of San Bernardino. So immediately following the fire, we successfully built a debris basin and reseeded the entire area. This proved to be very successful. We got the spillway finished in time to catch all the debris in the basin and had no flood problems as a result. Our success this time was much better than in 1935 with the flood prevention attempt at the head of Euclid Avenue.

Fry: Now, you had to build this with Forest Service personnel?

Nelson: With Forest Service and hired labor, yes. Then, of course, there was a threat of war growing all the time. In cooperation with the Western Defense Command, we started to develop the nucleus of an aircraft warning service using our fire lookouts. (One of our main peaks on the San Bernardino Forest was Strawberry Peak, which overlooks the valley to the south and Lake Arrowhead and off over the desert to the north.) When Pearl Harbor was attacked on December 7, 1941, we got the word flashed to us to immediately activate our aircraft warning service stations. And I think we broke a record. We had our Strawberry Peak activated in twelve minutes from the time we got the order, and we were in business. A rather interesting incident--

Fry: Wait a minute. I think we need to know what you mean by "activated."

Nelson: Manned. The lookout was manned and reporting any and all aircraft through channels to the headquarters control base, which was located in the Veterans Auditorium in San Bernardino.

I had rather an interesting experience just the morning after this. Early in the morning I got a call from someone that reported that there were signals being flashed off of Strawberry Peak. Of course, everyone was jittery, thinking of sabotage and signaling of enemy aircraft. Immediately we went up there to check this out. I could find nothing to confirm it, and my man on the lookout denied any such action. (This was reported from the telephone company's office by one of the telephone company people in the town of San Bernardino.)

The next morning about this same time I went down to the telephone company and prearranged with this man so we could take a look up there, and sure enough it did look like there were some flashing signals. What it turned out to be was the light flickering in the wind, and the atmosphere made a sort of flickering light which, to jittery people, looked like signaling.

Fry: When the sun was coming up?

Nelson: Just coming up and looked for all the world like somebody was signaling code. [Laughter] That shows just how tense everyone was. As far as aircraft warning service was concerned, we had to set up a very tight network all through the valley, the Mojave Desert, and the Colorado Desert, of aircraft warning stations. Of course, those in the mountains were deep in snow at that time of year, and those out in the desert had no water and there were no communication facilities.

We had to develop a radio network. We got trailer units and put people out there, hauled water to them, and as fast as we could we would install a five-hundred gallon redwood tank so that we could take enough water to them to supply them for a while. We had them scattered all over the desert, and it got to be quite an operation. It was quite a morale problem because these people were so badly isolated, particularly out in the desert area. No communication except what was then a rather crude radio instrument; they couldn't use it for anything but reporting airplanes. And they had to be on the alert night and day. We tried to get a man and wife combination so they could work around the clock.

Out there in the desert in the summertime it got to be terribly hot. I remember one report I got from Pinto Basin in the Joshua Tree National Monument--the thermometer burst at 135° F. We did have a few morale problems, but here again, people seemed to measure up to them when the chips were down.

Fry: Well, did you have charge of this just within the bounds of your national forest?

Nelson: I had charge of the operation within the national forest, most of the country on the Mojave Desert side, and on the Colorado Desert down to the Salton Sea. We were covering a good many millions of acres.

Fry: The Forest Service took over this for the whole state?

Nelson: Yes, the Forest Service and the State Division of Forestry. With our cooperating counties, we had a network all over the state. There was a similar network over the West.

Fry: It was organized so that the forest supervisors were the center of everything?

Nelson: Yes. We handled it in our areas of jurisdiction, and our areas of jurisdiction got much larger.

Fry: Did you ever really spot any enemy aircraft?

Nelson: Enemy aircraft? No, no we didn't, to my knowledge. Of course, later on the Japanese were sending over incendiary balloons. We had a number of those; a few of them landed in California. Most of them were carried by the prevailing winds to the north. For example, we had one that landed and draped over our telephone line going up to Bully Choop Peak lookout in Shasta County.

Fry: Did that one do any damage?

Nelson: No, their devices were not very good.

Fry: Did any of those get as far south as San Bernardino?

Nelson: No, not to my knowledge. But they were one of those threats. You never knew what might come through; they had a variety of incendiary bombs and one personnel bomb attached to them. The incendiary bombs were geared so as the balloon would come down, one or more incendiary bombs would be released at different elevations. A good many of them floated up into Canada apparently, and I never heard of their being effective.

Fry: Kept you looking at the skies.

Nelson: Yes, it certainly did.

Fry: What large effort did you indulge in here during the war period on the San Bernardino? I guess you had a problem of personnel.

Nelson: We had that problem, but we worked very closely with the military on a variety of things. We had lots of military training camps around there, both in the valley and on the desert and--Oh, one incident: They put a camp out by Little Mountain, just northwest of San Bernardino. They--the army--built a firing range on a bench at the foot of the mountain, under Crestline, which is a community on the crest of the mountain. This was the worst place in the world for a firing range because of the potential fire danger caused by their firing of incendiary bullets and from ricocheting bullets. The camp commander came down and wanted us to fire-proof the area so they wouldn't start a conflagration. So, we designed our plan for fire-proofing the area. It was right in the heat of summer, so it would be a tricky job; we could have a disaster.

With help from the army, we built a wide firebreak around about a three-hundred-acre area, using small ridges and natural features as much as possible. On the day of the burn, we got all our pumpers in there that we had and put hose lines around the entire perimeter of the area and distributed about three hundred troops around the perimeter, with our foremen as leaders. We got the hose lines filled so if water was needed it would be immediately available. I located

Nelson: myself on the bench where I could see the entire action, and with my radio I was able to control all the action on the side hill. By starting our backfire near the top and then burning it down each side simultaneously, we successfully burned it out in one night. As I recall, the relative humidity was nine, which is awful darn low. That was my first experience with controlled burning. It was a ticklish job, but we got away with it. Consequently we had no fire accidents from that firing range.

The military was also experimenting with incendiary bombs at that time, out at Edwards Air Force Base. They had some old abandoned barracks that they had assembled like a town might be, and they wanted us to come out and fire-proof the desert for them so they wouldn't start any wild fires out there. Well, I never worked so hard to fire-proof anything in my life without getting anything to burn, because there wasn't enough grass to carry the fire from one sagebrush to the other. We did our best, and the army carried out their experiments safely.

We did have at this time some rather critical fires on the front face of the San Bernardino mountains. Also on the front country of the San Jacinto mountains. Here we had to rely pretty heavily on the military for their support, of which they gave us and gave us willingly, up until we'd gotten pretty deeply into the war; then it was difficult to get troops for fire fighting. But we came through in good shape.

Another interesting thing happened, which I was unable to complete. San Bernardino had an estimated billion board feet of standing timber on Forest Service land, even though most people think of the San Bernardino as a brush forest; when you get up in the higher elevations, there's some very nice timber country. On the area north of Big Bear Lake, there was a very over-mature stand of ponderosa pine, just full of dead and dying, bug-infested, over-mature trees. There was also a good stand, but with a heavy insect infestation, in much of the timber in Big Bear Lake area and also in the Barton Flats area, which is the headwaters of the Santa Ana River, and a very popular recreation area.

Well, I wanted to harvest the dead and dying timber on a salvage basis, for two reasons: one, to utilize it while it was useful, and the other was to reduce the bug infestation. We didn't have people to cruise it, but the Quaker brethren were active in that area at that time. They were instrumental in getting what we knew then as conscientious objectors into a type of work that would contribute to the war effort. I was able to get a crew of these boys and a forester to put in charge of them, and they cruised much of this timber and worked out a cutting plan. During this process, I carried on a rather intensive educational program with the people and county

Nelson: authorities, pointing out what we wanted to do and why and how we wanted to do it.

Fry: Was this with your crews?

Nelson: Yes, the conscientious objectors were my employees on this job. The citizens in the area didn't want any timber cut for fear it would destroy the beauty and recreational values. Finally I got an endorsement to carry through with the project and everything was going along fine--and then I was moved.

I left the Forest Service and came to the state service. In Auburn there was a chap by the name of J. P. Hall, who published at that time (he's now dead) the California Mining Journal. He was fundamentally against anything the government did. (I later got acquainted with him and we became good friends.) But when the Service offered the dead and dying timber north of Big Bear Lake for sale, Hall, through his journal, killed the proposal. It turned out that most of that area was covered by long-abandoned mining claims, but there were a few claimants still around. Under the mining laws of 1872 the claimant had the right to use any timber from the claim needed in mining. There had been no mining there for decades, but we were blocked from harvesting or salvaging any of the timber.

Shortly after that, my successor was able to go into the Barton Flats recreational area and harvest the bug-susceptible trees. They did a beautiful job, cutting the stumps right down to the ground and clearing out all the slash so the uninitiated would never know that there had been any logging done in there. Since then, they've been back in there several times and taken out more dead, dying, and infected trees. Young trees are coming in to replace the old decadent trees, and this has become one of the prime examples of how proper timber management can be compatible with recreation management and recreation use. But it takes work and effort to accomplish it by developing an understanding public. But it can be done.

Fry: I was going to ask you about a little detail here. You said that you used conscientious objectors for cruisers and for working out cutting plans. It sounds like activities that do take a certain amount of training.

Nelson: It does, but those fellows were pretty intelligent, and I was able to recruit a young forester, Earl White, who was pretty good. He took on a crew of ten or twelve of these conscientious objectors and they did a workmanlike job. We were just using the available resources that were at hand.

The bug problem--bark beetles--was serious throughout all of the timbered area. While it was an endemic situation, an epidemic explosion was constantly possible. We needed to do something to keep

Nelson: the bugs in reasonable check. Under provisions of federal law and regulations, the Forest Service could provide one-half the control costs on private lands which were intermingled with government lands. Of course, the government would defray all the control cost on government land. Our problem was to get funds to match the one-half cost on the private lands.

It so happened that the county was divided into five flood control districts. The Mountain Flood Control District cooperated with us on a number of fire prevention and control projects such as fire break and fire road construction jobs. Since retention of a healthy stand of timber was desirable, and since dead trees and snags are a serious fire hazard, the District agreed to pay for one-half of the bug control costs on the private land. A recent check, 1976, informed me that this cooperative arrangement was still active.

Fry: What was your social life in San Bernardino?

Nelson: From a social point of view, during this four years in San Bernardino, 1940-1944, we enjoyed our tour very, very much. We had many good friends outside of our own professional interests, and I was active in Rotary and the San Bernardino County Sheriff's posse and became president of that organization. We always had a lot of fun with that group. We had a limited membership of fifty men, and we would ride in parades and were always available for call, but never got called. [Laughter] Once a year we would take a five-day ride through the mountains. We would limit the participants to one hundred riders. We got a lot of interesting people from all over Southern California, including a lot of movie celebrities. I also rode with the Vasueros del Desiertos, which was a riding group out of Palm Springs. These all made interesting contacts.

At the same time Mrs. Nelson was very active in the YWCA. She was president of the YWCA when General Patton moved his troops into Desert Center, out in the Colorado Desert, for training on desert warfare. They took over the YWCA as a USO headquarters. So Mrs. Nelson was active in USO work all during the war, as well as Red Cross work. She always claims she took her military training under General Patton. [Laughter] Makes a good story. We enjoyed it there very much.

Fry: I remember now that Myron Krueger said to be sure and ask you what differences you found in the reception for the Forest Service program in Southern California as compared with Northern California.

Nelson: At that time, much more cordial. The people in Southern California were very aware of the importance of the protection of the watersheds. We had a tri-county organization made up of key men in Orange, Riverside, and San Bernardino counties. A few of the key men were Willard

Nelson: Smith of Orange County, Francis Cuttle of Riverside County, Dr. Bayless and Mr. William Starkey of San Bernardino County. They were a public motivating force in fire protection. Also the Los Angeles Chamber of Commerce, with whom we worked very closely, had a strong fire prevention organization. It was through my contacts with the L.A. Chamber in public interest development for fire protection in both Los Angeles and all of Southern California, that I became acquainted with Mr. W. S. Rosecrans, whom Governor Warren appointed chairman of the State Board of Forestry in 1943.

Fry: And you were to be very close to him.

Nelson: I was to be very close to him in later years. So one thing--I don't know. It's the interplay and associations that seem to chart a course for a career. I don't know what it is.

Fry: But you were able to get support from important people in the towns?

Nelson: Yes. Yes, we were. Very, very strong support. At that time there weren't so many people there. There were leaders, and people would listen, and they seemed to understand. We had lots of fire, some incendiary fires, a number of accidental fires, and some industrial fires--railroads and power lines.

Fry: Well, let's see, this was--did you have any experience with the problem of the Okies coming in? Were their camps set up anywhere near your area?

Nelson: Those came in during the thirties; I was in Northern California at that time. We had the Hoover villages scattered over the state. The grapes of wrath were moving into California in the thirties. I was in the north most of that time.

Fry: What about pressure for recreation during the war? Was this just out of the question because of the wartime emergency?

Nelson: No, there was lots of recreation in the San Bernardino mountains. The people would flow up there over the weekend and holidays. It was just terrific. What they call the "high gear" road winds down off the mountain into the head of Sierra Avenue in San Bernardino. On a Sunday night the car lights would look like a string of pearls coming down off of the mountain.

Fry: And there was the Forest Service with its depleted ranks. This must have been a real problem.

Nelson: We got relatively few fires off of that highway, though. We got relatively few fires in the heavily-used areas; people seemed to police each other.

Fry: Were they campers or just picnickers?

Nelson: Campers, lots of campers, picnickers, and of course, the resorts. There were resorts at Big Bear Lake, Crestline, Running Springs and Lake Arrowhead. Most of our disastrous fires started around the fringe or at the base of the mountains. We had one very disastrous fire on the north side of the San Bernardino mountains in Deep Creek Canyon. It was a very definite threat to Lake Arrowhead and all the very highly developed area on the mountain top. There's a very crooked steep dirt road, a narrow road coming from the Lake Arrowhead area down the north side, which brings you out in the Mojave River drainage.

I remember one night we had to backfire that narrow, crooked road. It was a very touchy backfire job. I was backfiring with what we called an "orchard" torch, or a "drip" torch. (I mentioned Fred Funke on the Shasta forest earlier.) Fred was with me at the time, and I was using this drip torch to set the backfire. All at once the drip torch exploded. Fortunately I had it beside me. The bottom blew out and went back that way [gesture] and the drip torch flew into the air fifty or sixty feet. It nearly took my hand with it. It was really jet-propelled. If I'd been holding it in front of me I don't know what would have happened; it wouldn't have been good. Well, as a result of that incident, Fred Funke developed an orchard torch that won't explode, and we're using them to this day.

On that same fire I had another incident. There were lots of Seventh Day Adventists in that country. Come Friday evening, from Friday evening to Saturday evening, they insist on taking their sabbath. On this fire we had a little colored Seventh Day Adventist preacher as one of the cook's helpers in our fire camp. Saturday morning, when I came down the line to get my breakfast, I saw him and I said to him, "You aren't supposed to be working here today. This is your sabbath. How come?" He says, "Boss, the good book says if the cow falls in the well, thou shalt pull it out, and your cow done fell in the well." [Laughter] He was so right.

Fry: Were there any other problems on the San Bernardino that were peculiar to that area?

Nelson: Our fire problems, our aircraft warning service at that time, our cooperation with the military, my attempt to properly harvest timber, which later was accomplished--we have hardly mentioned recreation.

Fry: Did you have much recreation business? Being so close to metropolitan Los Angeles you must have had heavy pressures for mountain recreation.

Nelson: Yes, indeed. The San Bernardino was the heaviest-used national forest for recreational purposes of all the nation's national forests.

Nelson: This included the intermingled private lands on which were located Lakes Arrowhead, Gregory, Green Valley, and Big Bear, all of them man-made. Each supported resorts, summer homes, and all kinds of recreational activities.

On the forest we had a number of campgrounds, all of which were heavily used, as well as many summer homes and resorts under special use permits. The Barton Flats area, located in the headwaters of the Santa Ana River, was a very popular camping area. We also had a number of organization camps in that area under permit. This was also true of the Mt. San Jacinto mountain unit. In addition we had the San Gorgonio and Mt. San Jacinto primitive areas. There was constant pressure to open the San Gorgonio area to winter sports development. Our special use business in the field of recreation was very heavy; in fact, the second largest in the country. This was primarily for summer homes and resorts.

I should acknowledge a splendid staff--Claude Barker, deputy supervisor; Frank Robinson, lands and recreation; Jay Spencer and John (Pork) Harris in engineering and construction; and William Nelson (no relation) as office manager. In the field we had five very good rangers.

Fry: Did you have any timber sales down there?

Nelson: No, not at that time. There was a little timber cutting up around Lake Arrowhead on private land. There was a chap who had a small sawmill at Alpine. He was cutting bug-killed trees and over-mature trees on property that belonged to the Lake Arrowhead resort company. There was another small sawmill at Big Bear that was doing the same thing. We did sell to them some of our insect-killed and highly susceptible trees, but they were a very small operation. We had some cattle grazing on the desert side of the mountain.

Fry: Your problems and management dealt primarily with fire protection and recreation management.

Nelson: Right--those were the major issues.

Fry: Did it seem easier to you than the northern forests?

Nelson: No, because the protection and recreation pressures were much greater.

Fry: Was so much greater. And it was less--

Nelson: There were a lot of problems, of course, connected with fire. There were the usual people's problems all the time. We had some difficult incendiary or arson fires. It was during this time the Service was exploring a psychological approach or solution to incendiarism. Dr.

Nelson: John P. Shea of the Washington office spent some time with us working on this problem. He viewed the man-made fire problem from two aspects: normal impulses and abnormal impulses. The first are the thoughtless and careless people, while the second are more complex (such as pyromaniacs). He had no simple solutions for the latter.

Fry: You wanted me to remind you to mention the proposed federal regulation of privately owned timber operations.

WASHINGTON PERSONALITIES IN THE FOREST SERVICE

Nelson: Chief Silcox died in December, 1939. Earle Clapp succeeded him as Acting Chief Forester. As Acting Chief, his primary objective was to accomplish the federal regulation of timber harvesting on private lands throughout the country.

Fry: Who finally succeeded Clapp as Chief Forester?

Nelson: He was succeeded by Watts. What was Watts's first name?

Fry: Lyle Watts.

Nelson: Correct, Lyle Watts. Going back just a little bit, it was during this early '40s period that Earle Clapp, as Acting Chief Forester, began to push very hard for federal regulation of all timber cutting on privately owned lands. When Lyle Watts became Chief, he carried on this same campaign. I remember during this period that Ed Kotok, then out of the Washington office in charge of state and private forestry, came to Southern California and called a meeting of the southern forest supervisors to give us the word on federal regulation. I remember that Ed and I had a rather sharp conflict at that time because I didn't believe in federal regulation and he did. So we crossed swords a bit at that meeting. But we didn't get any blood on the saddle as a result of it.

Fry: Yes. Your superior in Washington, up through Show, would have been the man who was in charge of national forest operations. And Kotok was in some other--

Nelson: Kotok was in State and Private, which would handle the relationships of the Forest Service to the privately owned timber lands.

Fry: Was this very much a threat to your professional standing?

Nelson: It didn't seem to be. I just let Ed know that I didn't agree with the concept. Of course, Ed didn't like it, but I never felt any threat from it.

Fry: What were the supervisors expected to do?

Nelson: We were supposed to support the proposal and to try to sell the concept to the public. But it just didn't ring a bell with me, and I couldn't let it go unsaid. So I made my position clear at that time. He seemed to accept it after some discussion. I never heard any more from it.

Fry: The threat of changing the Forest Service from the Department of Agriculture to the Department of Interior had largely dwindled by the time?

Nelson: That was all behind us, yes.

Fry: I guess earlier Dunwoody of the State Chamber of Commerce had had a great deal to do with that.

Nelson: No, as I recall, Charlie Dunwoody was involved in the attempt of Secretary Ickes to transfer the Forest Service from the Department of Agriculture to the Department of Interior. Apparently Dunwoody was made the scapegoat and was fired by the State Chamber of Commerce. He was very bitter for a long time. From all I could learn, he was given a bum deal.

Fry: Where were you located when this was going on?

Nelson: That was about 1938 and I was on the Tahoe National Forest.

Fry: Were you in contact with this at all?

Nelson: I had some contact with him. Charlie Dunwoody and I were good friends. He would frequently come around and cry on my shoulder about the assignment which the State Chamber had given him. It broke him as far as the State Chamber was concerned. He later landed on his feet and did pretty well. I got a letter from Charlie just last, oh, about Christmas time. [1966] He was living in Pomona. He's pretty badly crippled with rheumatism, but he still likes to reminisce about the "good old days."

Fry: What was it that broke him with the Chamber of Commerce?

Nelson: Well, he just, I think, just tried too hard.

Fry: And getting called down in Washington?

Nelson: I guess so. Yes. He practically lived in Washington for a while. According to his story, his room was ransacked quite frequently, trying to find evidence of one kind or another that would incriminate

Nelson: him. Just what they were looking for, I don't know. But it became a very critical issue.

Fry: Did you have anything more to bring in about Bevier Show?

Nelson: No. But before leaving the San Bernardino, I must recount an interesting incident that may be hard to believe, but I swear it is true.

One Sunday in February, 1944, a few of us had a picnic on the desert near Palm Springs. In the group was a Miss Dora Gabler, a school teacher from Rialto. She started telling fortunes with cards. In my case, she said, "You will soon be going to the Capitol." To one in the Forest Service, there was only one Capitol--Washington, D. C. My response was, "No way! I want no part of Washington."

The upshot was that within two months I reported for duty at the state capitol as deputy director of the State Department of Natural Resources.

Fry: This looks like a good place to leave the San Bernardino and go to the state.

JOINING THE CALIFORNIA DEPARTMENT OF NATURAL RESOURCES

Reform Under Governor Earl Warren

Nelson: Yes. We'll have to back up a little bit, I guess. In 1942 Earl Warren was elected governor of the state of California, and he took over as governor at the beginning of 1943. One of the first things that he did after he got himself squared away in the governor's office was to accept most of the resignations of the old State Board of Forestry and to appoint a new board. He appointed William S. Rosecrans of Los Angeles as chairman of the board. Along with him, Mr. Jeffrey Prendergast of Redlands; Mr. Domingo Hardison of Ventura County; he retained Wendell Robie of Auburn, Roderick McArthur of Siskiyou County, and Frank Reynolds of Mendocino County. Let's see, I've listed there, I believe, six people, haven't I? Oh yes--and Kenneth Walker of the Red River Lumber Company, Lassen County, was a new member.

Fry: Yes.

Nelson: The governor called them in, and I don't know what month this was. After he'd gotten them appointed and told them in strong terms that he wanted something done with the Division of Forestry to improve its protection ability and to do something in the field of forest practices, he made it very plain that he wanted a real ongoing program in forestry.

Now, what motivated Governor Warren in this area, I have never known. But something obviously did. In February of 1944, he appointed General Warren T. Hannum (retired) as director of the Department of Natural Resources. The department at that time was made up of divisions of forestry, mines, oil and gas, beaches and parks, and fish and game.

Fry: These divisions were included under Natural Resources?

Nelson: Yes. It was obvious that Mr. M. B. Pratt, then state forester, was about to retire. The State Board of Forestry, in cooperation with

Nelson: Director Hannum, went in search of a possible successor for Mr. Pratt as state forester. I guess I happened to be in line of fire when they discussed possible candidates with Mr. Show, and my personal acquaintance with Mr. Rosecrans, Mr. Robie, and Mr. Prendergast down through the years undoubtedly helped. I happened to be the man selected for the task. The only spot that was available at that time was that of deputy director of the Department of Natural Resources, as an interim spot pending Mr. Pratt's retirement. So, I came to Sacramento on the 20th day of April, 1944, as deputy director of the Department of Natural Resources, and General Hannum immediately assigned me full time to the forestry program.

It is interesting to note that I had had some casual contacts with General Hannum during the 1930s when he was district engineer in command of the Army Corps of Engineers, San Francisco, and I was supervisor of the Tahoe Forest. During that period, the Depression, I did a lot of work with the mining interests. The Hydraulic Miners Association prevailed on Congress, through Congressman Harry Englebright of Nevada City, to authorize the construction of two debris dams so hydraulic mining could be resumed in the upper watersheds. The Corps of Engineers built the dams--one on the Yuba River near Smartsville, and the other on the North Fork of the American River. Hydraulic mining never did get under way, which was fortunate because the debris would have destroyed many miles of beautiful streams. Instead, the two reservoirs have become popular recreation areas.

Fry: That is interesting. Did General Hannum immediately assign you to the Division of Forestry?

Nelson: Yes. I immediately went to work with the forestry staff, finding out what their programs were, what their budget was, what their plans were, and getting acquainted throughout the state with some of the men in the field, many of whom I already knew because of my association throughout the state.

Fry: This is a good transition topic, by the way. What sort of contact had you had with the State Division of Forestry during the time you were in the federal service?

Nelson: Yes. Well, I had worked with all the state forest rangers that were anywhere near the four forests that I had been supervisor of, and we'd worked closely together with, and had a few quarrels over who should be fighting whose fire and one thing and another.

But I think my greatest experience in close cooperation was in San Bernardino, where State Forest Ranger Russell Smith was an outstanding man. There we, the Forest Service and the state ranger,

Nelson: worked together just as a team, and that still obtains. It had become pretty generally the character of state and federal relationships over the state. But because of the public support and concern about fire protection in the south, the federal and state services just have to work together; there isn't any choice. The people would rise up in arms if they didn't. There I got well acquainted with the people in that segment of the state service.

Arrival in Sacramento

Nelson: The day I landed here in Sacramento, the State Board of Forestry was in session. I came up by train and went into the Senator Hotel to register, and an old friend from Weaverville, Edwin J. Regan (then district attorney of Trinity County, later Senator Regan, and now Justice Ed Regan) came up behind me and slapped me on the back and said, "What the hell do you think you're going to do for the State of California?" [Laughter] After Ed's "warm" welcome I went to the Board of Forestry meeting. I might say that Ed's reception was not entirely in jest because the Forest Service wasn't universally popular at that time.

My first reception by a few was pretty much along the same lines. Because they were afraid that here was a guy from the Forest Service that was going to come in and push the concepts of the federal service, which included federal regulation of timber and everything else, it was an interesting situation to walk into. I found some of the same atmosphere on initial contacts with men in the Division of Forestry. They didn't know what to expect, as would be natural. But we soon took care of that.

Fry: Then I guess it isn't altogether clear to me what the differences were between the outlook of the federal Forest Service and the state Division of Forestry here, in addition to the two things we've already talked about, this federal regulation and--

Nelson: The State Division of Forestry at that time was nothing but a fire fighting organization. They had no legislation or no plans for anything else, as far as timber harvesting was concerned, as far as a state forest was concerned or basic policies in the resource management field at all. Their main and just about their only job was that of fire protection. And at that time they were not too strongly equipped in most areas for that job. They had a nucleus of very fine dedicated men, but they weren't adequately staffed or equipped. Consequently, under the Clarke-McNary laws and other federal assistance programs, much of the protection was done under the leadership and push of the Forest Service and under the leadership of Jay Price, who worked very closely with the division,

DeWitt Nelson, State Forester
and Governor Earl Warren (1950)

Nelson: trying to build it into a strong organization in the field. Jay Price was one of those wonderful men who worked closely with the division and gave them leadership and a tremendous amount of help. You undoubtedly have heard Ray Clar speak of him. Well, he was just one of the gold-plated men in the Forest Service.

Fry: So that the Forest Service ideas, which were broader, really, than the Division of Forestry policies at that time, must have presented somewhat of a threat to the men in the division?

Nelson: You must remember the Forest Service had their own lands. They had the land and resource management ability and responsibility. The state had no lands of its own, per se. It was protecting privately owned lands and, of course, a few scattered state parks and things of that nature. But they had no jurisdiction over what or how the resource was used. Consequently, they were confined to the problem of fire protection. Up until 1943, they were financing the protection, in large part, with a tax of a few cents per acre against the landowner under provisions of a compulsory fire patrol law plus some Clarke-McNary money from the Forest Service and plus what the individual rangers could get from their respective counties. The General Fund appropriations were very limited.

Fry: Now, there's two little minor things that I just want to clear up here in my own mind. One is that I noticed on the pre-Rosecrans board there had been a representative there representing recreation or something like that, and this disappeared with the coming in of the new board. Now, did you think this was significant?

Nelson: I don't remember that aspect.

Fry: Land--land and recreation, or something. I can't right at this moment give you the name of the man.

Nelson: Was it Hartranft?

Fry: No. It's just--I'll have to look it up. Well, at any rate, then you didn't see this as meaning that the new board was anti any kind of state recreation?

Nelson: Oh no.

Fry: And then I guess the other thing was that there had been, I think, a timber diameter.

Nelson: Yes, there was on the books a minimum diameter below which one should not cut trees for saw log purposes. That caused nothing but confusion.

Fry: It was probably just something else that you had to--

Nelson: Yes. We finally got rid of that when we passed the Forest Practice Act.

Redefining the Role of the State Division of Forestry

Fry: Did you start working immediately with the details surrounding the work of the forest study committee?

Nelson: Yes. That would be one of the issues, the program to start on. Now let me see. There were so many actions that played into the final moves. The State Board of Forestry was in session. It was a new board, faced with many new and rather difficult problems, as well as opportunities.

The one problem I remember being discussed at this first board meeting which I attended on the day of my arrival in Sacramento was presented by Senator George Hatfield, who was one of the senior senators from down in the San Joaquin Valley and one of the most potent men in the legislature. The subject on which he was working was to get the State Division of Forestry to assume the fire protection responsibility for that area situated in the Coast Range mountains south of the Altamont Pass.

This was an area that had traditionally been protected by county fire districts. They had several very rough fire seasons, which had not only been more than the districts could handle with their limited forces, but had cost the counties more money than they felt justified in spending on the protection of that hill country. A change would require the Division of Forestry to change its fire protection policy, which it had been following since it had not been active in that area.

This move by Senator Hatfield later culminated in the passage of legislation in the 1945 session which, for the first time, defined the state's and the Division of Forestry's fire protection responsibility. It simply defined the state responsibility area as covering those lands which are timber or which are forested or capable of producing forest--lands which were of primary watershed values and contiguous range land thereto. This legislation required the Division to survey the state and establish the boundaries of the state responsibility area, subject to approval by the State Board of Forestry. This was accomplished during 1945 and '46, after the passage of the legislation in 1945.

Fry: Was this the one called Section 2000 or something like that?

Nelson: No. This is in the 4000 series. This particular law also defined the local responsibility areas as being those lands outside of the state responsibility area. As a result of the surveys which were subsequently made, three zones of protection were established by the Division; zone one being the timber and primary watersheds, which are recognized by the U.S. Forest Service as qualifying for Clarke-McNary funds; zone two being those lands of purely state responsibility and not qualifying for Clarke-McNary funds--primarily range and secondary watershed lands; and zone three being those lands which are designated as local responsibility. Of course, federal lands and incorporated areas are excluded. Senator George Hatfield was the motivating force in securing this legislation in 1945.

Fry: Now, I don't understand clearly what was different about this from the Sanford Plan of 1932.

Nelson: Well, this gave us statutory authority and responsibility to assume the full level of protection on those lands defined as zones one and two. The Sanford Plan was not supported by legislation and, therefore, it had no force in law.

Fry: Regardless of when you were expecting air attacks?

Nelson: Yes. This did in large part follow the basic principles established by the Sanford Plan, which was made for the Division of Forestry back in the early thirties.

Fry: Going back to your arrival in Sacramento, I gather you were not warmly welcomed by all. Why was that?

Nelson: There were probably three reasons. The Forest Service was not popular in some quarters: (1) because of the pressure to force federal regulations on all private land timber harvesting; (2) there was local pressure on the federal government to pay "in lieu" taxes on all Forest Service lands; and (3) I was a newcomer, an unknown quantity. Many feared that I would try to apply the Forest Service policies in the state. I didn't blame them. Many viewed me as one of the enemy infiltrated into their camp.

In addition, the Division was already in turmoil. Governor Warren had appointed William H. Moore, deputy director of the Department of Finance, as director of the Department of Natural Resources, on an interim basis. Mr. Moore was familiar with some of the Division's problems of organization. The organization really amounted to a confederation of counties because in many instances the state rangers got more support from their county than they did from the state. Therefore, many rangers were prone to follow the dictates of the county supervisors rather than those of the state forester.

Nelson: Mr. Moore upset that situation by establishing six geographical administrative districts with a deputy state forester and a small staff in charge of each. In several counties this practically caused a mutiny as far as the rangers and county supervisors were concerned. This was part of the climate that existed internally when I came to Sacramento. It took some time and a couple of early retirements before things smoothed out.

There were other problems. There were five counties--Los Angeles, Ventura, Santa Barbara, San Mateo, and Marin Counties--which had always provided their own fire protection organization with some subventions from the state. In the reorganization turmoil several other counties threatened to go independent, especially Orange, San Bernardino, and Kern Counties. Kern County was the only one that actually did go independent. Some years ago, San Mateo County came into the Division.

Fry: What was the state's relationship with the independent counties?

Nelson: To start with, it was rather vague. They were demanding more financial assistance, at least more of the Clarke-McNary funds which the state received from the federal government. At that time there was no uniformity of cooperation with the counties. But I am getting ahead of my story. Now would be the time to restate your question about the Biggar Committee.

Fry: Why don't you tell us something about the organization and make-up of the committee?

Nelson: It was a joint interim committee chaired by Senator George H. Biggar of Mendocino County. It was charged with the responsibility of studying the forest situation in California and hopefully to come up with legislation that would improve the forest conditions. This in part was stimulated, in my belief, by the federal government's drive to initiate federal regulation of private timber harvesting. The authorizing legislation, Chapter 1686, Statutes of 1943, gave the committee a very broad field of study. This was an unusual committee; it was composed of Senator George M. Biggar of Covelo, as chairman; Senator Oliver J. Carter of Redding, who has since become a federal judge in San Francisco; Assemblyman Paul Denny of Aetna; and Assemblyman Jacob M. Leonard of Hollister. Now, the unusual part of this committee was that it also included the director of the Department of Natural Resources (General Warren T. Hannum, retired), and the chairman of the State Board of Forestry, William S. Rosecrans. In my years of experience I've never known another committee of this type.

Fry: I wonder how they managed to get this membership established in the initial resolution.

Nelson: I don't know; it was created under legislation enacted in 1943, before I came here, and I think it was probably at the instigation of Governor Warren, even though he had not at that time selected his board of forestry chairman or director of the department.

One of the important features of this committee was that Professor Emanuel Fritz of the University of California School of Forestry was hired as consultant for the committee. Emanuel Fritz was and still is an old-timer in the forest field and was an authority, particularly in the redwood region, on timber. Another interesting part of this whole committee operation was that Mr. James Dean, then the director of the Department of Finance, and Rolland A Vandegrift, the legislative auditor, both took a very active interest in the committee's program. They joined with the committee on many of its field trips. With their participation, along with the legislative representative, we had very fine support for the development of legislation which stemmed from their studies.

A great number of trips were made by this committee during the summer of 1944, with Vandegrift usually with us and frequently Director Dean. Emanuel Fritz had scheduled everything ahead of time. We would look over the forest, range, and the watershed problems during the day, and nearly every night we would wind up with some type of a public meeting. Through those public meetings, which were well attended, we had a sounding board for what the people believed and what they wanted. As you would expect, there were many conflicts of views and conflicts of interest.

Fry: Right at this time, when you were having your public meetings in the field, was there a consensus of the sort of legislation that you wanted?

Nelson: No, we were still in the exploratory stage, wondering what the problems were out there in the field and what should be done about them--what type of legislation should be enacted (such as, should there be some regulatory legislation of timber harvesting); what should we do in developing a protection organization; was there need for range improvement through the use of fire as a tool in clearing the brush-covered land, etc., etc? This was one of the burning issues (and I use the word burning both figuratively and literally). I remember particularly up on the north coast in Mendocino and Humboldt Counties, we had some very warm discussions with the ranchers who wanted to burn off all the brush and demanded that it be burned off. The exclusion of fire was destroying the livestock ranges. Not only was the brush destroying the range, but the Douglas fir timber was encroaching on it. We had pretty much the same concept with the redwood timber industry on the north coast.

Nelson: I remember many people, and one particularly--a Mr. Hale, chairman of the County Board of Supervisors in Mendocino County. He testified that once the redwood was harvested there would be no more redwoods, so burn the country off and convert it to grass range. He was a sheep grower. He felt second-growth redwood never would come to commercial size or commercial value. But he lived to see the day when second-growth redwood was harvested, and he changed his mind. In fact, I think he paid off the mortgage on his ranch by selling some of his redwood second-growth timber. [Laughter]

Fry: In other words, you were conducting the meetings primarily as experiments?

Nelson: Senator Biggar and the interim committee conducted these hearings as an interim study, and they were conducted as formal meetings. Usually the people let their hair down and expressed their views very candidly.

Another thing that was interesting, Paul Denny of Aetna (that's in Scott Valley, Siskiyou County) was an old cattleman from that country. He didn't have much faith in forestry; he had fought the Forest Service for a good many years of his life over his grazing permits. Oliver Carter of Redding believed that the brush country ought to be burned off. But by the time we completed the hearings and developed the legislation as a result of these studies, they both became staunch supporters of good forest management, as well as good range improvement programs. Yes, using fire, but using fire under control and on a management basis, and then applying some management to the lands, like reseeding and control of the brush sprouts afterwards, a problem which we are still working on in many parts of the state. They all became full believers in the proper management and development of our wildland resources.

Fry: Was this largely because a number of the landowners made their views felt through the CFPA [California Forest Protective Association] and working with Schofield and his impact on the final bill?

Nelson: Schofield had little or no influence as far as the ranchers were concerned, as far as range management and use of fire in brush clearing was concerned. Schofield had a tremendous influence with the timber people, and much of the success in getting the Forest Practices law enacted was, in my judgment, because of the leadership that Schofield gave to the timber industry. His constituents, the California Forest Protective Association, came into line in support of a regulatory program. There was still the threat of federal regulation, and I have always believed that the timber industry chose the lesser of two evils, shall we say; they would much rather have

Nelson: state regulation than federal regulation, which I think is still the way that it should be.

But Bill Schofield was a dominating factor as far as the timber industry was concerned. Along with this, there were a number of actions that took place sort of parallel to each other. I remember that Mr. Rosecrans called an "off-the-record" meeting (before the Brown Act) of the board of forestry in San Francisco--it must have been about August of 1944--in which he just simply laid out to the timber people (and there was an excellent representation of the timber interests there--both the pine, redwood, and Douglas fir) that something had to be done to properly manage our forest resources and to manage them on a continuous production basis. This turned out to be an all-day session in which the representatives of the timber industry expressed their own points of view. But in the final analysis, they joined ranks with Mr. Rosecrans and the Board of Forestry in assenting to the development of legislation that would provide for state regulation.

Fry: Primarily because Rosecrans had frankly talked with them about the threat of federal regulation?

Nelson: Well, he didn't emphasize that. He didn't use that as either a threat or an alternate. Mr. Rosecrans was a man of high integrity and prestige. Everyone had confidence in him, and they saw that through the interim committee they were going to get something. They recognized that there was a new day dawning, and they had better be for something, I think--this is a sort of back look analysis of it, but they did pledge their support to Mr. Rosecrans. However, they reserved the right to full participation in the development of the rules and regulations.

Emanuel Fritz had obtained a copy of a conservancy act passed by the state of Maryland the previous year. He and Schofield used this as a guide in drafting a forest practices act proposal for consideration by the committee. The committee and all of us put in many hours developing the final draft of the Forest Practice Act. The act created four district forest practices committees, one for each of the geographical forest districts, who were responsible for developing the rules through the process of public hearings. The rules were then submitted to the Board of Forestry for approval. The Board had no authority to revise the rules or draft its own. All they could do was return them to the committee with reasons for their refusal to approve them. The initial rules had to be approved by two-thirds vote of the timber ownership.

Fry: In that--the development of the bill--according to my notes, after the first draft was more or less agreed upon, I think by the board possibly, and the committee, there was another model bill,

Fry: prepared by the forestry committee of council of state governments. This was the work of Governor Snell's committee in Oregon, which Schofield used as the basis for the alternate plan provision in the Forest Practice Act.

Nelson: Yes, you are correct. I am quite sure the alternate plan idea came from the council of state governments' suggested or model bill. I believe the Biggar Committee report of 1945 has a copy of that proposal.

Fry: Well, do you remember having difficulty in bringing together a group who on the one hand wanted to be sure that this bill was kept narrowly restricted to just cutting--and this was Schofield's group (as I get from reading letters and things)--and then on the other hand Senator Biggar's committee, who wanted to bring in other things that concerned management of timber lands, such as wildlife, soil erosion control, things like this?

Nelson: Yes, we had that problem. In this area, the timber industry won the day, in that the legislation only recognized these other elements in the broad policy statement at the beginning of the legislation. Since the passage of that legislation in 1945, we have I think it's three amendments to the law, the last one of '63 which gives us some better tools for enforcement. The original concept was designed pretty much around an educational program, with a philosophy that the timber industry would be self-policing. This didn't work. I can't say it totally failed, because the major timber industries did a pretty fair job. The majority of them went further than the law and the rules required. Our big problem was and still is with the small timber owners and the small timber operators who have no continuity of life or policy; their problem is to get a dollar today and not worry about tomorrow. They don't have the responsibility that the major owners have to keep their lands productive in order to protect their total investment and their stockholders.

Fry: And who have enough land for management over a long period of time?

Nelson: Most of the majors have plenty of land for long-term management and production. There will be some changes in products and possibly volumes. Changes in utilization are already taking place. The legislation passed in 1963 has strengthened the state forester's hand a great deal. As a result, considerable progress has been made in better enforcement. We still do not have adequate recognition in the law for protecting streams and the prevention of soil erosion. Here we have another conflict: the Department of Fish and Game has the ultra-preservation concept. All streams must be preserved in their pristine purity, and the fish are more important than a timber industry. A problem here, like everything else, is

Nelson: to find a reasonable level of agreement and understanding. This has been a continual problem; we're continuing to work on it; the industry itself is continuing to work with the Fish and Game Department. There has been legislation written into the Fish and Game code which gives them considerable authority over logging around streams, but they haven't exercised it to any great extent.

Fry: All this is the leaving of a zone of timber along streams?

Nelson: Yes. We have to recognize here a simple fact of life, whether we all like it or not, that we are dealing with privately owned property. Some things can be interpreted as confiscatory in nature and are in violation of the constitution. But slowly we are making progress, and one of these days there's going to be a fringe left along many of our streams. We're doing it in some places now. Greater care and greater recognition of all related resources is essential.

This is a real problem in education and in the owners and operators recognizing that they too have to be good neighbors and that they too have responsibilities to other people. Of course, under our water pollution control laws, the regional water pollution control boards can move in and take action on some of these areas, because severe sedimentation and log jams and things like that in streams can be interpreted as pollution. They haven't so far used it as a tool to any great extent.

Fry: How do you work with the heads of these other agencies? Can you pick up a telephone and call and say, "We're having trouble here. We have no jurisdiction actually, and could you do this?"

Nelson: We do that occasionally. But both they and we prefer to get the men in the field, the field representatives of both organizations, to work these problems out on the ground with the operators. When that can be accomplished, it's much more satisfactory in long-term success.

Fry: Do all agencies involved have this edict to their men in the field, to cooperate with the men from the other agencies?

Nelson: They have the instructions, variously interpreted and applied. We get back here again to philosophy and concepts of values and responsibilities. It so happens that I am about the only representative in the natural resources field that wages--I shouldn't say a war--carries on an effort for recognition of private land ownership and industrial operations.

Fry: As having basic inherent rights?

Nelson: Yes. Of those having the basic inherent rights, is right. In practically all other instances the resource departments are dealing with publicly owned property. The Department of Water Resources is developing and transporting water; water is a public resource. The Department of Fish and Game is dealing with the fish and wildlife--a public resource. The Department of Parks and Recreation is acquiring and developing parks, beaches, historical monuments, and recreation areas--again, publicly owned property.

We are dealing, with the exception of our seventy thousand acres of state forests, entirely with private ownership. And while some claim that we are clientele-oriented, I claim that Fish and Game and the others are more rigidly clientele-oriented than are we because they are concerned only with that one resource, for what I think in many instances, of a very selfish group. The same with parks and recreation, and water departments. I have carried out sortof a lone fight down through the years as a public representative, at times, of the private interest. I've tried to do it with full recognition of the public values and economic welfare of the state. It's been an interesting and sometimes lonesome situation.

Acquiring New State Forests

Fry: Well, along this line, did you ever feel undue pressure to acquire more state forest than you actually did?

Nelson: No, I think we met the requirements of the law in our purchase programs of four good units of about seventy thousand acres.

Along with the Biggar Committee, there was an idea developed that the state should have some state forests. Of California's 100 million acres, about 19 million are in national forests and nearly 48 percent of the total land area is in federal ownership. The committee thought we should have some state forests to be used as demonstration areas in which the private timber companies could work with the state forester in developing practices and techniques that they couldn't do on national forest lands. This was particularly true in the redwood region because there was very little redwood timber in national ownership. About the only redwood timber in public ownership was that acquired by the Division of Beaches and Parks. So, in 1945 there was enacted the state forest legislation, which authorized us to acquire a limited amount of timber land for state forests, primarily for research and demonstration purposes.

Fry: I have a note here that the first appropriation was for $2 million.

Assembly Passes Biggar Bill Creating New State Forest to Conserve Supply of Timber

By BERNIECE BATTERTON

CALIFORNIA would acquire and maintain a state forest under provisions of the Senate-approved Biggar Bill which survived vigorous opposition in the Assembly yesterday and passed by a vote of 56 to 9. It will be ready for the governor's desk after Senate approval of amendments. This is one of a series of bills to reorganize the State board of Forestry and acquire for timber conservation and reforestation cut-over timber lands which are likely to go into public ownership through tax delinquency.

"Private owners cannot undertake the expense of reforestation nor wait 75 to 100 years for regrowth," Assemblyman Paul Denny said in sponsoring the bill before the lower house.

The state has done nothing to conserve its timber for the past 50 years, and it will be entirely depleted within 30 to 40 years, Assemblyman Jacob M. Leonard said in support of the bill.

Fears End to Timber

Fifty per cent of the state's $300,000,000 lumber industry will be liquidated within 10 years unless conservation and reforestation is undertaken on a large scale, he stated.

No taxes would be lost to the counties, he said, since the bill provides that an amount equal to the taxes will be paid the counties by the state when such lands are removed from their tax rolls.

Assemblyman Alfred Robertson opposed the bill as "the worst piece of legislation which has ever come before this house."

Sees Growing Snbsidy

"It calls for an appropriation of $500,000—next year it will be $5,000,000, and after that, who knows?" he demanded.

Only the big timber interests would profit by the state going into the tree-growing and lumber business, he charged.

The $500,000 appropriation is contained in another Biggar bill still before the Senate, and is to provide funds to acquire two experimental forests under an acquisition board. This board includes the governor, director of natural resources, chairman of the state board of forestry and director of finances.

The new Division of Forestry Board will include representatives of the pine, redwood, forest land, range and livestock, agricultural and water resources interests.

Friday, March 15, 1946

Warren Signs Forestry Bill

Governor Warren yesterday signed the $2,000,000 reforestation bill passed by the recent special session of the Legislature which will permit the State Department of Natural Resources to acquire lands for a reforestation program.

The project will be the first of its kind under direct auspices of the state government.

California Forestry Study Committee, the Assembly Committee on Forest Fire Prevention and the State Board of Forestry are conducting a series of hearings at the capitol, which will conclude tomorrow. Sen. George M. Biggar of Mendocino County, who sponsored the reforestation bill, is presiding.

Nelson: Yes, that was appropriated in 1946. The 1945 legislation authorized and directed us to make a study to determine what we should buy, what was available for purchase, and to make recommendations to the state forest purchase commission (composed of the governor, the director of the Department of Finance, the director of the Department of Natural Resources, and the chairman of the State Board of Forestry).

At that time, B. C. Goldsmith, with whom I had worked in the national forests for a number of years, on both the Shasta and Tahoe, had just retired. He was an excellent timber man, so I hired him to make a survey of the state and to determine what properties might be available and what should be recommended for acquisition as one or more state forests.

Fry: Where did the money for the purchase of the state forests come from?

Nelson: During the spring of 1946 Governor Warren called a special session of the legislature. It was during that session that the legislature appropriated $2 million for the acquisition of state forests as provided in the statutes of 1945.

Under this program we acquired two units. Many years before--I guess in the early thirties--the Division of Forestry, in cooperation with the U.S. Forest Service, and the State Division of Lands, had gotten together and, through an exchange process, had consolidated in one ownership, under the jurisdiction of the State Division of Lands, about ten thousand acres in the Latour area of Shasta County. The Division of Lands didn't know what to do with this, so we took that on as one of our first state forest proposals. I had Mr. Goldsmith appraise it and we worked out a deal with the Division of Lands to acquire this ten thousand acres for $100,000. We presented this to the state forest purchase committee, and they approved it. This proved to be a very good acquisition; we paid $100,000 for it, and they have harvested over a half a million dollars worth of timber off the property since then. At that time, this was a good purchase for the state, and it was a good sale for the Division of Lands because those funds--the $100,000--went into the state school fund.

Fry: Where is this unit located?

Nelson: In the headwaters of Cow Creek, eastern Shasta County.

A correction on that last statement in regard to the revenues from the Latour State Forest: instead of a half a million dollars, that should be revenues in excess of $1 million, as of 1965.

Nelson: Then the next big state forest acquisition project. After looking all over the state and particularly the redwood region, Mr. Goldsmith came up with a possible purchase of some cutover lands from the Caspar Lumber Company in Mendocino County. Mr. Cass Wood, then president of the Casper Lumber Company, was getting pretty well along in years, and his son was not interested in taking over the management of the property. When Mr. Goldsmith checked in on the possibility of its acquisition Mr. Wood was amenable to discussing it. His logging superintendent at that time was Kelly McGuire, who had been with him for twenty-five or thirty years. Kelly became very interested in the proposed purchase by the state. Kelly was a forestry graduate from Oregon State. This started out, as I remember, for the purchase of only the cutover lands with the second-growth timber thereon. Now, this piece of property extended from near the coast to nearly the top of the divide between Fort Bragg and Willits, about 47,000 acres in extent.

We proceeded to negotiate with the Casper people, and we worked out a purchase price of all the cutover lands, plus the second-growth timber, of $15 an acre. About that time Mr. McGuire came and said they had some recent cutover lands that had been cut on a rather selective basis with a pretty good residual leave of old timber, and he suggested that we take this also. So we figured that was pretty good, and we worked out a price, as I recall, of $1.50 per thousand for the residual timber and $15 an acre for the land and small trees. Then Kelly came in again and said that Mr. Wood would like to have us consider taking the whole property and see what we could work out on that. So we finally worked out a price of $2.50 a thousand for all the virgin timber that was left, plus $15 an acre for the land.

After months and months of negotiation and taking on a little bit more and a little bit more, and working with them, we finally came up with the proposal that we acquire the whole property. Then about that time, Mr. Wood decided no, he didn't want to sell all of his property; he thought that since Kelly McGuire had been with him all these years and done loyal service, he should give Kelly something. So he gave Kelly, as I recall, about two thousand acres right on the divide between Big River and Noyo River, and on the highway between Willits and Fort Bragg. This became the piece of property to be known as area M, I presume for McGuire. But this piece of property caused us a great deal of trouble because the deed of it to Kelly McGuire controlled the access right-of-way from Fort Bragg to a large block of Union Lumber Company holdings in the Big River drainage. At that time, Mr. Cass Wood of the Caspar Lumber Company and Mr. Otis Johnson, president of the Union Lumber Company, were not speaking to each other, as they hadn't been for many years. They just couldn't work out a right-of-way for Union Lumber Company to cross the so-called area M land. This involved more weeks of negotiations.

Nelson: We finally worked out a solution whereby Cass Wood and Kelly McGuire granted a perpetual right-of-way through this area M to the state so that the Union Lumber Company would have access to their timber in Big River. The state in turn granted a perpetual right-of-way to the Union Lumber Company. This was the most difficult part of this whole transaction, and it was only because the two top men of these two companies would not speak to each other. They had had a falling out in a negotiation many, many years previously.

Fry: You were caught in this because this was part of the entire deal, right? It was not that it occurred at a time when you already had some of this land so that--

Nelson: No, no, we hadn't closed the transaction yet.

Fry: Yes. So that area M never belonged to the state.

Nelson: No, area M never belonged to us. Well, after many months of hard work and negotiations and getting all the legal documents processed through the attorney general's office, and attorneys on both sides fighting for everything they could get, we finally got together. I think it was in November of 1947, if memory serves me right, that we closed the deal. When we took the Jackson State Forest purchase proposal to the forest purchase committee, composed of the governor, Mr. Rosecrans, General Hannum, and Director Dean, there were a lot of the timber industry people present. I remember one, a very fine old gentleman--George McLeod--who was a former president of the Hammond Lumber Company at Samoa. He made a long speech that this was the most short-sighted transaction that the state had ever entered into, that they never would get their money out of it, that they should not be buying it, that it was a poor investment, and that the idea of paying $1,353,000 for 47,000 acres of old-growth and second-growth timber just wasn't practical.

Fry: Was this because he felt second-growth redwood was not going to be too valuable?

Nelson: I think that in part and--I never could understand his position. He was a wily old Scotsman and had made his fortune out of timber. But when he made those remarks, I felt that he didn't have any faith in the future as far as timber as a renewable resource was concerned. He had no personal interest in it. He was just giving his advice, presumably from a state interest point of view. In spite of his opposition, the purchase committee approved the purchase.

It so happens that we have taken from the Jackson Forest about $7.5 million worth of revenue as of 1965, and the revenue that will come off of that this year--1966--will exceed a half million dollars. So it has proven to be a very profitable investment.

Acquiring Mountain Home Tract

Nelson: Yes, that was an interesting case and one that shows the power of public opinion. Concurrent with these other projects, there was a piece of property owned by the Michigan Trust Company located in an area known as Mountain Home in Tulare County. This is at a rather high elevation, ranging from around six thousand to some eight thousand feet in elevation, near the southern reaches of the Sierra Nevada mountain range. At that elevation it had a mixed conifer stand of ponderosa pine, sugar pine, white fir, red fir, and sequoia gigantea, the Sierra redwoods. It had a beautiful stand of Sierra redwoods and some very beautiful second-growth Sierra redwoods. This area had been partially logged for the redwood around the turn of the century. After World War II the company apparently needed some money, and they sold the redwood to some split products operators. These were tremendous trees, and rather than worry about the hard work of cutting them down, they would go around the tree with wood augers and bore holes into it, then fill the holes with black powder and blast them down. The Sierra redwood is a very brittle wood. When that great weight would fall and hit the ground without any previous bedding preparation, the trees would pop open like a watermelon and splinter and destroy a high percentage of the good wood in the tree.

Well, the only thing this group was interested in was the split products--fence posts and grape stakes and things of that nature. They would use maybe two, three, or four of the butt cuts that were not shattered in the fall. They would split those into fence posts and other split products and leave all the rest. Now, this made a terrible mess, and it was certainly a desecration of the redwood and the entire property.

Fry: I assume this was going on before your Forest Practice Act was really instituted.

Nelson: Oh yes, it was. The native sons and daughters of California, particularly a group out of Los Angeles and the upper San Joaquin Valley, just rose up in arms and demanded that something be done about it. They put on enough pressure that we got a special bill through the state legislature to purchase this property, and that legislation appropriated $750,000 for its acquisition.

Fry: What particular legislators were involved with that, do you remember?

Nelson: No. I wish I could remember. He was one of the legislators from Southern California. As it turned out, we were able to acquire it for about $550,000. There was about 4500 acres in the property.

Nelson: That piece of legislation was a little bit different from our regular state forest authorization. This legislation directs that the property be managed "as a multiple use forest, primarily for public hunting, fishing, and recreation."

Fry: Does this put you in the recreation business?

Nelson: It has put us in the recreation business, indeed. This was a rather popular recreation place to start with. Right in the center of this property there is an eighty-acre piece of property owned by Tulare County which was given to the county by a Mr. Balch; it is known as Balch County Park. At one time the county proposed to give this eighty acres to the State Division of Beaches and Parks. The county supervisors and many people were at the park to commemorate its transfer to the state. But in the process of the transfer and dedication, the county supervisors learned that the State Division of Beaches and Parks would probably charge for the use of the recreation facilities. So the county withdrew their offer right in the middle of the dedication ceremony. [Laughter]

Fry: Oh no!

Nelson: That was some years before we acquired the surrounding area as a state forest. But this has long been a popular recreation area for a limited number of people; it has a steep, crooked road going up to it. It was named Mountain Home because so many people from the valley went up there in the summertime to get away from the heat. It's a very beautiful spot. There was a sawmill operating in the area when we took it over; we got rid of it, and we have since developed the old mill pond into a small lake with fish in it. It was a very decadent forest property. The pine and the fir timber were terribly over-mature and in a declining situation.

The first thing we did was go in there and make a highly selective sanitation cut and harvested much of this over-mature and decadent timber. This was done over a period of several years. We still are making a few timber sales on that basis. Following the war there was a market for most anything, and we could sell those old rotting trees at a pretty fair price. We got them out of the stand and cleaned up the woods. We put a CYA conservation camp in there, and they spent many summers just cleaning up the debris from the trees that had been blown down by the dynamiters. In this cleanup we sold a lot of split products. We even put a shingle mill in there of our own and produced shingles for the buildings we were building for our fire stations throughout the state.

We now have an eighty-man inmate conservation camp located just outside the forest. They are doing a lot of work in cleaning up the forest and developing campgrounds and recreation facilities. It's a beautiful spot.

Nelson: We're confronted with another problem now. One of these days we should go in there and thin the second-growth Sierra redwood. When that is done there will probably be protests.

Fry: What are you going to do with the native sons and daughters when you do that?

Nelson: Before we do that we will have to put on a very good educational program. But the second-growth redwood is too thick. The competition is going to prevent them from growing to the size they should and a lot of them are going to be outranked and die. We can improve it with some judicious thinning. After we had done the sanitation cutting and cleaned up the over-mature and dying pine and white fir, we have a much better looking property for recreation purposes than before. Now you can see the big trees. Before, you couldn't appreciate the big trees because of the growth around them.

We have done a lot of reforestation up there too. We built a station there for a concessionaire for a pack outfit. This is one entrance to the Sequoia National Park. Many people pack into the park from here. Incidentally, we have taken in from the Mountain Home State Forest nearly a half million dollars of revenue from the harvesting of that old mature timber [as of 1965].

Fry: So it will eventually pay for itself. It almost has now.

Nelson: Yes.

Timber Sales in State Forests

Fry: How do you handle timber sales? Do you let bids for other companies come in and do it like you did in the national forests?

Nelson: It's all done on a competitive bid basis, under rigid contracts.

Fry: How do you attack the problem of the counties who lose the land from their tax rolls when you buy up something for state forest?

Nelson: I'm glad you asked that question. That got to be quite an issue when we were drafting the state forest legislation in 1944. All through the public hearings of the Biggar Committee, we'd heard the demand from the people that the national forest should pay an in-lieu tax or the land should be turned over to the state so the state could do something with it. When we were drafting the State Forest Purchase Bill, I well remember one session in which the committee, Mr. Rosecrans and myself were working together around

Nelson: the table and I brought up the issue that we should provide for an in-lieu tax on state forests. We had a very hot debate that it shouldn't be done. I remember Senator Oliver Carter (who at that time was rather anti-national forest, and who had heard all these debates demanding that some type of an in-lieu tax be provided from the national forests) took the stand that the state shouldn't be paying an in-lieu tax. But--

Fry: He was anti any kind of payment to the counties, or just the national--?

Nelson: Yes, just the state forests. This was one argument I won, and we put into the legislation that the state would pay "an amount equivalent to taxes levied by the county on similar lands similarly situated." So every year we pay taxes on all of our state forests, including school taxes and everything. It gets to be a pretty sizable figure.

Speaking of in-lieu taxes, the following table reports timber sales by volume and revenue paid to the state and taxes paid to the respective counties in 1966.

State Forest	Vol. (MBM)	Value	Xmas Trees & Misc.	Value	Total Value	Taxes 1965-1966
Mt. Home	340	$ 1,549.48	1,674	$1,648.20	$ 3,197.68	$ 1,638.57
Latour	3,230	77,913.98	8,000	3,690.00	81,603.98	4,419.94
Jackson	27,981	770,873.29	--	50.00	770,923.29	34,825.92
Boggs Mt.	--	--	--	--	--	1,944.18
Totals*	31,551	$850,336.75	9,674	$5,338.20	$855,724.94	$42,828.61

*Comparing the 1966 taxes with 1975 taxes shows how timber taxes relate to market values.

State Forest	Vol. (MBM)	Value	Xmas Trees & Misc.	Value	Total Value	Taxes 1974-1975
Mt. Home	3,518	$ 317,269,08	--	--	$ 317,269.08	$ 32,952.12
Latour	5,332	261,889.72	2,224	$4,029.40	265,919.08	48,175.97
Jackson	26,368	1,872,678.57	--	--	1,874,867.20	472,108.18
Boggs Mt.	7	276.04	--	--	276.04	4,470.71
Totals	35,225	$2,452,113.08	2,224	$4,029.40	$2,458,331.44	$557,706.98
Accumulated Totals as of 1975	722,092	$27,808,933.40	96,298	$125,747.27	$27,944,680.67	$2,581,824.74

Fry: This is simply handled as an expense in the budget.

Nelson: That's right. Of course, our revenues all go into the general fund.

There was one other state forest acquisition--the Boggs Mountain State Forest in 1949. This has an area of about 3400 acres situated in the resort country--that is, the pine mountain country of Lake County. This was a piece of property that was owned by the Setzer Forest Products Company of Sacramento. They wanted the timber but they didn't want to hold the land. It was a hundred-and-sixteen-mile haul for the timber from there to their mill in Sacramento; after they got the timber off of it, they didn't want to hold that small piece of isolated property. So we worked out with them the purchase of this property under a pre-cutting contract, where we established cutting standards, they harvested the mature timber, and we got possession of the property. According to your notes here, we paid something over $38,000 for this. This too has proven to be a very good buy. While we have not taken any revenue from it yet, we soon will. This little piece of property has reforested itself by the seed trees which we required to be left in the logging operation, better than most any piece of cut-over land I know. Just fantastic.

It holds a very key spot in the heart of a resort and recreation area, and we are just now finishing the development of a recreation plan for it. Now that we have a conservation camp situated in Lake County, we will be developing it for recreation purposes. Some campgrounds, but in large part it will be used for riding and hiking purposes. It will be a tremendous asset to all of the surrounding resorts because this is one piece of wild land that will not be developed. The resort people are very interested in our managing it because they recognize that it will be an asset and a piece of property that will probably be held in its semivirgin condition. At least it will be open space undeveloped with buildings. Those are our state forests, with the exception of a few small scattered properties that have been donated over the years.

We had one addition to the Jackson State Forest known as the Mendocino Woodlands. This was a property that, during the Depression under the Roosevelt administration, was acquired in one of the resettlement programs. The people were moved off and the National Park Service went in there and spent something over a million dollars in developing organization camp facilities. It adjoins the Jackson State Forest. It has some virgin timber in the bottom land, but the surrounding hill land was logged off many years ago, back in the 1880s, I guess, and now it has a beautiful stand of second-growth timber on it. The federal government wanted to get rid of it, so it was donated to us under a trust deed that we should manage it for forest and recreation purposes. If at any

Nelson: time we violated the trust deed requirements it could revert back to the federal government.

Fry: Is this really much of a multipurpose type operation there?

Nelson: It is. We are now in the process of developing a new recreation plan for the area, along with a recreation plan for the Jackson State Forest as a whole. One of the policy requirements established by the Department of Finance when we took it over was that we should not spend any money on maintenance or improvement of the many structures that are there, and that some way or another we'd have to handle it without any costs. There were a number of organization camps like YWCA, the Boys Club, and Salvation Army, from the Bay Area, who had been using it as organization campsites during the summer seasons. We worked with them and created an association which requires them to maintain and operate the facilities.

This worked satisfactorily for some time, and in recent years we've gotten some relief from the Department of Finance's policies enunciated back in those days and have been able to spend some money on the water and sewage systems. Now we're in there with our conservation camp people reroofing the buildings, and we're going to have to go in there and do a real job. It is an area that ultimately could and probably should be developed as a conservation center of some kind. Maybe not as elaborate, but along the concept of Asilomar, in Monterey County. It will never be as popular or as good because the winter climate up there is very poor--dripping fog and cold rain.

Fry: Now, in all these forests, what do you think have been the research values that have come from them as demonstration forests?

Nelson: Our greatest opportunity in the field of research, so far, has been on the Jackson State Forest. There has been little or no research or experimentation in the management of redwood and Douglas fir second-growth timber in the past. Incidentally, the volume of second-growth on many thousands of acres of the Jackson Forest is probably as heavy as when it was in a virgin state. Of course, it is in many more trees. It has from eighty to ninety thousand board feet of timber per acre, after only eighty-five to ninety years since it was clear cut back in the 1870s and '80s. It shows the productive capacity of those lands. In recent years we've been conducting experiments in how to manage this second growth.

There hasn't been any opportunity to experiment in this field in a major way because there wasn't any market until recently for second-growth timber. So now we are trying various silvicultural techniques--clear cut, selective cut, unit cut, and combinations.

Nelson: Up until this year we have been doing the cutting and logging with our own men out of the conservation camp and skidding the material down to loading decks on the road and then selling the logs. This year [1966] we are making our first sale where the purchaser will do the logging under our supervision.

Another bit of research we are carrying on in there, in cooperation with the Department of Fish and Game and in consultation with the Department of Water Resources and the California Forest and Range Experiment Station, is some watershed studies. We have set aside two very similar watersheds on Casper Creek and have built sedimentation dams and weirs so that we can calibrate the runoff in both water and sediment. After these watersheds have been calibrated for several years, we will do some road construction to determine what that contributes in the form of sedimentation and runoff. Then after we have calibrated that, we will conduct various types of logging operations and calibrate the results from them.

Fry: I see. This work on Jackson--it started gradually? Or how would you place this in time as it developed?

Nelson: We started rather promptly; I've forgotten just when, but we put a forester and one or two men in there rather soon and started making some timber sales. We put one of our early conservation camps in there, which gave us some needed manpower. In the virgin timber we have done some demonstration work in various types of timber marking for selective cutting. We have done experimental work in trying to protect the streams from sedimentation as a result of logging. This is one of our big problems in the redwood region. The country is so steep and so erosive that you can't log without some loss of soil and getting some debris in the streams. It just can't be done. Even with very great care, which we've applied there.

Fry: What about the other types? Do those forests include a pretty good sampling of the various forest types?

Nelson: Pretty good, yes. The Jackson is primarily redwood and Douglas fir, and it is a type of which there is only about fifteen thousand acres in national forests in Del Norte County. So we are able to carry on some demonstration work on the Jackson Forest that no other agency is doing. We have an advisory committee made up of representatives of the timber industry who work with us, and this gives us the means of getting them out there and showing them what we're doing, as well as getting their ideas and suggestions. We give them demonstrations and we give them tours. One thing we should do is develop some self-guided tours for the public who go through there.

Nelson: The advisory committee made up of industry representatives, of which I spoke, counsel with us on some of the experimental work that we're carrying on. It also gives us a good means of transmitting to industry representatives the results of our experimental work.

Fry: You feel that this really is getting through to them and that they will follow good practices in managing their second-growth.

Nelson: I think it is, yes. Not too many of the major companies are yet harvesting much second-growth, but they are watching us quite closely to see what are the results.

Fry: Well, this is fine, because they do all have it in their plans to. They all know it's coming.

Nelson: Oh yes. They all are going to come to it very soon.

Fry: Do you run growth measurement studies? What do you call those?

Nelson: We have them. The Division of Forestry has applied modern techniques on the Jackson Forest. We have established a large number of growth plots and have everything on computer cards. We have been able to increase our annual allowable cut very recently up to about thirty million board feet per year. Now remember, this is an annual allowable cut of around thirty million feet per year from about a fifty thousand-acre piece of property.

Fry: My gosh. You increased it to that?

Nelson: We increased it. I think the previous allowable cut that we computed was around twenty-four million. The Division is applying the same techniques to the Latour State Forest. So we will have that on a computerized basis very soon. The Latour Forest is a good sample of pine, white fir, some Douglas fir, and a pretty good block of red fir. Here we have been carrying on some experimental work in Christmas tree culture in the second-growth red fir type. In the mature red fir we have had some very serious mistletoe infestations, which is becoming rather common throughout much of the state, and the Division has been doing some experimental work in mistletoe control. Then, of course, on the Mountain Home State Forest, I think we are demonstrating effectively that good timber management is compatible with good recreation.

Fry: Have you had to spend a lot of time in education of the preservationists--those who don't want any cutting?

Nelson: We've had to do some of that. We've had some people seriously object to cutting any trees in the Mountain Home Forest, even

Nelson: though they were dying faster than we could cut them for a while. But the general reception has been very good.

B. C. Goldsmith

Maybe I should give a little more information on B. C. Goldsmith.

Fry: Yes, please.

Nelson: Mr. Goldsmith was a Yale graduate, I think in about 1909, and joined the Forest Service and came to California immediately after graduation. He spent his entire career in timber management in the Forest Service, not only in the timber sale business but in land exchange and land acquisition.

On the Shasta Forest during the Depression period in the thirties, he did a tremendous job in acquiring a lot of the cut-over land that the timber companies wanted to get rid of in order to get rid of the tax burden. I remember the timber companies at that time were not cutting the incense cedar. Goldy would work out exchanges--stumpage for land--and before the Depression was over, there was a cedar mill in there cutting the incense cedar for pencil stock; in many cases we got as much out of the sale of the cedar as we paid for the land.

Fry: Did you know him on the Shasta?

Nelson: Yes. We worked together on the Shasta. It so happened that we worked together again on the Tahoe. So when he retired and I was confronted with the problem of moving into a state forest acquisition program he, of course, was a natural. He was an excellent timber man; he was well known and highly regarded by everyone. He was a man of unusual integrity.

Fry: And I guess he really knew the state forest land.

Nelson: He did a beautiful job in working out a state forest program.

Fry: Was this in the form of a sort of master plan of acquisition? Or was it looking for land that was most likely to be easily available from privately owned sources?

Nelson: No, we were looking primarily for land that we could use for demonstration purposes as prescribed in the law.

Fry: This included representative areas, is that right?

Nelson: Yes, primarily pointed toward the redwood region because the national forest had all the demonstration forests that were really needed in the pine country. Our main target area was the redwoods. And, of course, there was the problem of finding a piece of property of substantial size that was available. It just so happened that the Caspar Lumber Company started out with a sale of their old cut-over lands, and finally we built it into the acquisition of their entire property which, when combined with the adjoining Mendocino Woodlands property, rounds out to about fifty thousand acres.

PROBLEMS AND SOURCES OF CONFLICT

County Jurisdiction Relationships

Fry: Is there anything you would like to say to start off this interview on the conversion of the fire protection organization from one that was divided up by counties into one that was divided up into six administrative districts?

Nelson: Yes, I'd like to make a few comments on problems which confronted me when I took over the job of state forester in 1944. State Forester Pratt was really only physically on the job, since he planned to retire in November. Under these conditions I assumed the full responsibility of the state forester's job, even though I was officially deputy director of the department.

I believe I have previously mentioned that Governor Warren appointed William Moore from the Department of Finance as director of the department on a temporary basis. Bill Moore did more to upset things. But in the process he did a real service by creating the six geographical administrative districts; that was an excellent accomplishment.

During this whole period, Ray Clar, then chief deputy, was one of the motivating forces who conceived the idea of the district concept and helped put it into effect. With all due respect to Mr. Pratt, he didn't like to be bothered with all those difficult problems at his age in life. Ray was the leader in the Division at that time. However, Mr. Moore had done some things that just upset the working relationships with many cooperating counties to where it was nip and tuck as to whether we retained a working relationship with them or not.

Fry: How was that? What were those things?

Nelson: While this was a good administrative move, he didn't follow through in making it a cohesive organization. As is often the case in such a reorganization, the field men resented it. This new line of

Nelson: command restricted their freedom of movement and activities. Many rangers throughout the state were really working for the county supervisors in the counties in which they were located, rather than the state.

A case in point. One of the old-timers had done a good job in many respects. However, he totally ignored the state structure and organization and followed only the dictates and wishes of the local people of Lake County. It fell upon me to serve notice on him that he either become a part of the organization or accept retirement.

Fry: Were these rangers responsible directly to you?

Nelson: Yes, through the chain of command of the new district organization. He chose to take the political way out of this and went to the County Board of Supervisors and some of the other local leaders of the county. One day I had three men from Lake County appear in my office. One was the chairman of the County Board of Supervisors, one was Mr. Hoberg of the Hoberg Resort, and one other. They demanded the retention of Ranger Lindbloom and that he be permitted to do as he pleased, as the people of Lake County wanted him to do (which was primarily burning off the brush cover for hunting and grazing purposes).

Our discussion became so loud and noisy that you could hear it all over the office. They were demanding this and demanding that. I told Mr. Hoberg, of the resort, that I was sure that he required a loyalty to him in his organization in the resort; that he didn't let his chambermaids and cooks do as they pleased, that he ran his own operation, that he had an organizational structure, and that he had a line of command that carried out his policies. Of course, this he couldn't help but admit.

Nevertheless, it became a very emotional issue. General Hannum, the then director of the Department of Natural Resources, received petitions from Lake County demanding that Ranger Lindbloom be retained, and they requested our appearance at three public hearings in the county. General Hannum and I attended and presented our situation. The hearings were held in Lower Lake, Middletown, and Lake Port. This was a pretty full day--three public indignation hearings in one day--but we held our ground. As a consequence, Ranger Lindbloom did retire. Unfortunately, he was in poor health, mentally and physically, and quite incapable of handling the job. We got a new ranger, Miles Young, in there, and he spent a lot of time working with the local people. It worked out very successfully. In fact, it worked out to where some of the strong opponents to our reorganizational move became some of our strongest supporters.

Fry: How did this work out? How did this happen?

Nelson: Well, just by doing the job that we felt should be done and letting the people know what we were doing, what our policies were, and proving that we were willing to work with them in every way that was proper and within the framework of the statutes.

Fry: This might be a good example to take here of how you did somehow manage to reeducate a lot of the counties--this, and the grazing issues, and so forth. How did you disseminate this education to the people there? Did you have a pretty good press?

Nelson: [Laughter] I never did go in for a lot of press copy, but I never withheld anything from them either. Some of the press was rough. The editor of the Middletown newspaper really took me on. Of course, he was constantly trying to get me to enter into a newspaper debate with him, which I refused to do because you can't win one of those; the editor always has the last word. We did it only by trying to demonstrate good faith and giving the services that should be provided--working with them on problems of mutual concern and common interest, and not holding spite. After all, there was a job to be done, and we developed, I think, a mutual respect.

Fry: I understand that Director Moore created some other problems as far as county relationships were concerned. Is that correct?

Nelson: Yes, he did. But here we must go back to the beginning of World War II. Olson was then governor and Kenneth Fulton was director of the Department of Natural Resources. After Pearl Harbor on December 7, 1941, fire protection took on a new meaning. Due to California's climate, topography, and vegetative cover, the state was extremely vulnerable to widespread sabotage by fire. As part of the Civil Defense preparations against sabotage a statewide fire disaster plan was developed in cooperation with city and county Civil Defense committees.

Director Fulton, with Chief Deputy State Forester Ray Clar, requested an emergency budget in excess of $7 million. The legislature finally appropriated some $4 million for manpower and equipment throughout the state. (For more details see Evolution of California Fire Protection System by C. Ray Clar, published in 1969 by the Department of Conservation). Much of the equipment and some of the manpower was assigned to local levels of government under mutual agreements.

Along with Mr. Moore's fine reorganization job, which upset many counties, he quite arbitrarily dictated equipment assignments and use policies which caused much misunderstanding.

Nelson: Mr. Moore didn't seem to understand the manner of working with people. He had been in the Department of Finance all of his life, which is strictly a control agency, working as a control man to government men, and he didn't seem to understand the process of working with outside people. So one of the big problems that I found myself faced with was unraveling some of these relationship situations with the local levels of government.

Fry: Do you mean that some felt that they didn't get as much equipment or as much protection as others?

Nelson: That and who owned what and what was going to be the disposition of it, and were we going to work together or were we going to go our separate ways. The legislature also got involved in it. Senator Hatfield became a leader in the legislative arm, helping unravel it.

Fry: As a friend of the Division of Forestry, or was he attacking it?

Nelson: Well, one time he was on one side, it seemed, and another time he was on the other. But he did help in working out the legislative controls which gave us the tools for finally solving the problems.

Fry: Were you aware of these problems before you came to Sacramento?

Nelson: No. No, I was not. Those were just some of the things I found the day I landed, and which evolved as we went along.

Livestock Owners

Fry: At this time, had your range advisory service been started?

Nelson: No, it hadn't. But we had, a year after that, in 1945, the legislation which provided us with the authority to work with the local livestock people in clearing brush land where fire is used as a tool.

Fry: Are you talking about your range improvement legislation and the range advisory committee?

Nelson: Yes, the advisory committee was one of the mediums we used in developing solutions to the range problems. It worked out quite satisfactorily. But it didn't all happen overnight.

Fry: At this time the range management men and livestock owners really were a bit hostile towards the State Division of Forestry, weren't they?

Nelson: Oh, extremely so.

Fry: But now the [California] Woolgrowers Association is about to knight you with the Order of the Golden Fleece, so you must have done something.

Nelson: We worked with them. It was a case of recognizing each other's problems, understanding and recognizing each other's responsibilities, and showing good faith and the spirit of cooperation.

I never will forget a meeting we had with the livestock people in Ukiah; I think it was on February 3, 1945. Board member Frank Reynolds was with me. It was held in the back room of the Farm Extension Office in Ukiah. Mr. Foote was the County Extension Agent. We spent a whole day pounding out some policy matters and methods of operation in the range improvement program, where fire was to be used as a tool in clearing brush.

This was another rough day. But here again, a willingness to recognize each other's points of view and areas of responsibility, and with some give and take on both sides, we evolved the basic framework which then we developed into policy and methods of operation, working with the ranchers on the ground.

Fry: Was this a meeting of one of the range committees?

Nelson: That was before the range advisory committee was created by the board. It was a meeting of representatives of the woolgrowers, primarily. Chet Wing, secretary-manager of the Woolgrowers' Association, was there in full force with some of his strong advocates. The room was stacked against me. [Laughter] Nevertheless, we worked it out.

It has proven to be a successful operation in most instances. Here again, both sides have tried to protect the integrity of the program. There have been cases where some of our people have slipped, and there have been cases where some of the livestock people haven't carried their end of it; but by and large, it's been a good program--and here again, it evolved over a period of years.

Fry: Was most of the pressure from the livestock people or from the sportsmen?

Nelson: Practically all from the livestock people. Sportsmen came in later. They, however, aren't unified to do a work job. They more or less beat the drums and try to promote something, but they don't have an organization or a structure themselves where they can go out and work on these tasks themselves. There was one exception to that in the Madera area, in Madera and Fresno Counties.

Nelson: The sportsmen's association in that area did join with the ranchers and helped the ranchers in some of these so-called control burns, because there was a mutual benefit to both the rancher and the sportsmen.

Fry: What do you mean, "join with them in the control burns?"

Nelson: Yes, by providing men to help in the job of control burning. The task of keeping the fire confined within the prescribed limits. There's been a little bit of that in some of the other areas, too, particularly where the ranchers have leased the hunting rights to a group of sportsmen for deer hunting purposes.

Fry: It seems that there was some feeling on the part of industry that in fire protection, particularly up in the mountain regions, that the fire service, as a division of forestry crews and heads, didn't make use of information on terrain and types of equipment to use in some fires. Were you aware of this?

Nelson: That's not an uncommon charge. We've had that problem with some of the ranchers and some of the timber people. We've gotten on top of this as far as the timber people are concerned by holding annual pre-fire season meetings between our rangers, the fire control personnel, and the timber companies, by which they developed a program of mutual aid in event of fire in those areas.

We had one case in Monterey County sometime back--oh, I guess it was around the turn of the '40s and '50s. We had a terrific outbreak of fires down there during a combination of very critical fire weather, and a number of fires set by grain harvesting equipment, and fires set by the military in the Hunter-Ligett Reservation as well as a few incendiary fires, all occurring at one time. The ranger and the ranchers there were not getting along too well at that time. He did ignore some of the help and advice of the ranchers.

Following this, the local people requested that we get together and see if we couldn't develop a cooperative arrangement to solve some of these problems, which we did. This, fifteen or more years later, is still an annual affair, a meeting before and after the fire season; before the fire season, to get ourselves acquainted again and to lay out our organizational structure and develop how we can work together during the season (we've had very good success in these mutual aid arrangements); and then at the end of the season we get together, probably have a barbecue and recap the season's operations. At that time they review the weaknesses and successes which occurred. Here again, it's just the problem of working together with people.

Fry: Who attends this from the State Division of Forestry?

Nelson: Always the ranger and district deputies and their key personnel in fire control, representation from the State Forest Office, and the military because Hunter-Ligett is a big reservation in that area. The military carry on artillery practice all summer long. They do a lot of control burning themselves in order to hold the fire hazards down; but once in a while a fire will escape. The program has worked well for all parties--the military, the ranchers, and ourselves. This program was generated by the ranchers, and they give it much leadership.

Fry: This is what you do in all districts now.

Nelson: We try to. We do with the timber people, we do with a lot of the rancher people. I can't say it is entirely universal because we have different conditions existing in various parts of the state. We always get together with the key organizations, whether they be military or land ownership or what have you, and county officials and fire districts.

Fry: There was also a one and a half million dollar suit won by Michigan-California Company on mismanagement of a fire. That wasn't against the State Division of Forestry, was it?

Nelson: No. If we're both thinking of the same fire, that was one of several fires that occurred in 1960 when the Sacramento Municipal Utility District was building a series of dams in the headwaters of the South Fork of the American River. They had a very disastrous fire escape from one of their contractor's clean-up operations, and Michigan-California Lumber Company brought suit against them. The judgment amounted to somewhere around a million and a half or two million dollars in damage. That action was against the construction company and not against the State of California or the Forest Service. That fire happened to be inside the Eldorado National Forest protection boundary.

Fry: And that had nothing to do with the conduct of the fire control action?

Nelson: No, that fire in fact was inside the national forest and under their control and jurisdiction.

DEVELOPMENT OF FIRE PROTECTION

Fry: Is there anything else that you would like to add about the development of fire protection here?

Nelson: Well, things have progressed over the years. I think Ray Clar probably mentioned to you one instance in his interview. In 1945 we had a series of fires in the redwood country. Of course, the war was on, we were short of manpower, we were using troops from the army as much as we could, we were in very rough terrain, we had one fire near Ligett Valley that was 45,000 acres in extent, we were unable to get automotive equipment because of the war situation, and we were also short of hand tools.

I got on the phone from the fire line and called Ray Clar and told him the situation and said, "Now, you get hold of the Department of Finance and tell them that we've just got to have some four-wheel drive equipment, and we've got to have some more hand tools. We can pay for them out of the emergency fund because we certainly have an emergency situation." For the first time in history, the Department of Finance broke down and authorized us to buy quite a number of jeeps from the army and a lot of shovels and axes and other tools to do the job. We broke the precedent of no equipment purchases from emergency funds.

Fry: Just a minute. It isn't clear to me whether the precedent you broke was the use of jeeps or getting something from the Department of Finance.

Nelson: It was getting an emergency authorization to buy essential supplies from the emergency fund to fight the fires. Of course, we were trying to get some jeeps, but that was a luxury as far as budget was concerned, and we broke that precedent too.

I think I have related in previous tapes how, after the war, we were able to get a lot of surplus equipment--tractors and big trailer units to haul them on. We converted these so that they would fit our needs. We also got authorization to increase our number of tankers so we could better meet the fire situation. The legislature and the Department of Finance were very helpful in

DeWitt Nelson speaking on behalf of Forest Fire Prevention (Los Angeles, 1951)

Nelson: meeting our needs throughout this period, for they recognized the problem. In fact, Fred Links, the deputy director of Finance, called me one day and said, "Swede, I think you need a helicopter. I think we could get one for you if you want it." I told him, "Fred, we need some rolling stock on the ground a lot worse than we need a helicopter. I want more trucks and bulldozers and things of that nature. One helicopter over the whole state of California would not do the job. We are better off by hiring airplanes and helicopters at local levels when we need them and as we need them." We've been doing that ever since--hiring local planes for reconnaissance fire patrol purposes.

We, in cooperation with the Forest Service and the University and the California Forest and Range Experiment Station, put on a big field experiment in 1956. It was an operation at the Pendleton Marine base and it was called Operation Fire Stop. This was conceived and handled in large part by Keith Arnold, director of the Forest and Range Experiment Station. Under his leadership, the Division of Forestry, the Forest Service, and the County of Los Angeles contributed the manpower and equipment; the Marines at the Pendleton base gave us the land for all of our experiments in trying to develop new techniques in fire fighting. Douglas Aircraft joined with us in making a mock-up of an air tanker to see if there was any possibility of bombing fires from the air. The chemical companies joined with us in seeing if they couldn't develop fire retardants for use in bombing fires. Some of the oil companies joined with us and provided the fuel for carrying on these experiments. And the U.S. Weather Bureau joined in providing instruments and competent technicians in checking micro weather conditions. It was one of the biggest cooperative projects I've ever seen.

This was a three-month summer operation. We tried everything anybody could think of. Keith Arnold, then director of the Experiment Station, did a magnificent job of programming and of pulling all of this together. When it was all finished he figured that we had carried on an $800,000 research and field experimental program with a cash expenditure of public funds of about $75,000.

From this program and series of experiments did evolve the entire air tanker fire fighting technique. After that the Forest Service and the Division got a few people interested who had surplus military aircraft who converted TBM's to air tankers. Chemical companies like Borax worked in developing a fire retardant. We were able to develop some of the fundamental techniques, and from this evolved the entire air tanker program which now is universally used all over the country.

Nelson: Experiments in research have continued in the development of retardants--the borates, as they were known at the start, were soil sterilants. That had its handicaps; we didn't want to sterilize the soil because we wanted to get regrowth in order to avoid erosion. The chemical companies moved in with us, and they have developed a number of fire retardants that now have commercial names--Firetrol, Dap, and others. Many of them are derivatives of fertilizers, so that not only are they valuable from a retardant point of view, but they fertilize the soil and stimulate regrowth of the vegetation.

Fry: [Laughter] You'll have companies setting fires to their forests!

Nelson: Of course, this is an expensive operation. But had it not been for this development, we would have lost, during critical fire periods, thousands and thousands of acres of watershed and timber that were saved because of the ability of the air tankers to do their job.

Fry: Who made the initial contacts with the various industries involved, and the U.S. Marines, and the County of Los Angeles?

Nelson: Well, it was a joint effort, and who did what is kind of hard to tell. But the major credit should go to Keith Arnold because it was his idea; he was the ramrod, coordinator, planner, and developer of the whole program. Everybody moved in and helped.

Fry: And this has become, then, one of the primary fire suppressing techniques on major fires?

Nelson: Yes, the air tanker is very valuable for initial attack as well as on major fires. There are limitations to the air tankers. They can't operate at night, nor can they operate safely and effectively in too windy weather. Nor can they safely fly fires and drop their chemicals in heavy smoke because they can't see their hazards.

Only yesterday on a fire in Lake County, we had one plane that clipped a tree with his wing. Fortunately, he was able to get to the landing field at Ukiah. His landing gear wouldn't work, and he had to belly land. In the process, he flipped over, but he walked away from the wreck. We have lost a number of pilots and a number of planes in this program; but in most instances it has been pilot misjudgment or carelessness. It's a hazardous job when you fly down on the treetops over very rough terrain dropping chemicals. It's very easy to get washed out.

Fry: The use of infrared techniques is primarily limited to photography in these fires, isn't it, so far?

Nelson: Yes. The use of infrared photography is in its developmental stage. The experiment station and the Forest Service is in the process of developing this. We're working with them with contributed manpower and experimental work, but they're doing the basics and the financing of it. We're also working with instrument makers in fire scanning equipment.

The use of scanners from various lookouts, scanning the terrain and transmitting the images to a group of TV sets inside the dispatcher's office--this is only in the research stage. We're working with the equipment developers on this. We've had a number of proposals from some companies like Lockheed, who have been active in the space program, to get all of our problems onto computers so that we can more or less handle everything on a mechanized basis at the dispatcher's office. So far this hasn't been accomplished. There are so many variables in the field of fire control--the terrain, the cover, the weather, the micro weather in the area that can change from moment to moment, and the human element. We just haven't been able to figure out how to put all these variables into a machine and come out with some acceptable answers.

Fry: It's almost a timing of the input, isn't it? That's the problem.

Nelson: Yes, but we're doing some preliminary work on it. Probably one of these days it will come about where it will be very helpful. We need a lot of information on weather, weather forecasting; we need to know more about fire behavior under various climatic, terrain, and cover conditions. We need to develop new tools for fire fighting because we just can't get around some of these big fires in rough country fast enough. That's why many of them get big, that and the weather. Right now the Forest Service has a very critical fire in Mendocino County [1966]. We just wrapped up a couple of bad ones in that area ourselves, and we're still fighting fire the hard way--by hand--in many cases.

Fry: How do you think California compares in its progress on fire fighting with other forest states?

Nelson: Well, we're way ahead of them. Much of the new developments have stemmed from California. The air tanker is an example. Of course, California has the toughest fire problem with our long, hot, dry summers--our delightful Mediterranean-type climate. Most other parts of the country get critical fire weather, oh, maybe every few years; we never miss. We get critical fire weather and disastrous fires every year.

This is not unusual. Around mid-September we usually get high north and east wind periods with low humidities and high temperatures, and we can have a blow-up. In 1964, during a week

Nelson: of that kind of weather, we lost over 200,000 acres. In 1965 in another weekend under those weather conditions, we lost another 200,000 acres. And using everything we had in manpower and equipment, our losses were still heavy, too heavy.

Here again, our losses could have been at least twice that had it not been for the air tankers which were diverted from a major fire to the many, many small fires that occurred during that period and knocked them down while they were still small. Every man in the organization and out of our prison institutions was committed. I shudder to think what would have happened had it not been for the air tanker program.

That same situation occurred again this last week. We've had ten consecutive days over all the Sacramento and San Joaquin Valley country and the mountains of 100° or more in temperatures, and this is only July. We are having weather conditions and lack of fuel moisture, and the resulting burning conditions that we usually get in September. So we have a very critical fire season this year--no spring rains, and the vegetation dried out early and completely.

Fry: What has been the contribution of industry to this whole problem of fire protection? I mean specific industries and also the organizations like CFPA? What is your evaluation of them?

Nelson: The industry, of course, has--I'm speaking of the timber industry and also speaking of the livestock industry--the timber industry particularly has tremendous values at stake because their timber lands are exposed to all those fires. They have been very cooperative in helping prevent fires and to control fires.

Under our forest practice rules they are required to meet certain standards of fire prevention and patrol over their operational areas and following the day's shutdown. They are required to have certain types and kinds of fire fighting equipment. Many of the companies have outfitted themselves far beyond the requirements of the law, and they have supported the "Keep California Green" program. Practically all the timber corporations support that program with cash contributions. They have been helpful in getting fire legislation passed.

In 1947 we organized the California Citizens Fire Prevention Committee, made up of many kinds of regional and statewide industries, businesses, and associations such as public utilities, railroads, outdoor advertising firms, etc. Each year these organizations produce and distribute thousands of dollars worth of fire prevention material through their house organs, billings, phone booths, and various forms of public information. The Western

Nelson: Pacific has provided one man for about six months each year to work with all the railroads to get their rights-of-way fire proofed. We hold two meetings each spring, one in Los Angeles and one in San Francisco, where we review the previous year's records and accomplishments, set goals for the current year, and make a bronze plaque award to the organization that has made the year's best record. This has been going strong for nearly twenty years.

Of course, fire protection is, in effect, a subsidy to the timber industry and other land-owning organizations and people. In many states, the landowners have to pay a fire protection tax. In California it is all handled by the general fund budget because there is a valuable public interest at stake here. It should be a general fund expenditure because most of the fires are caused by John Q. Public. He should carry the burden.

Fry: Is there competition between grazing and timber interests for fire protection when you get right down to the crux of the problem in working out methods of organization?

Nelson: No, I don't think so. There is some conflict between the livestock people and the timber people in the use of fire in brush clearing where the use of the fire is near and a potential threat to timber values. Then the timber people are very concerned. I don't think they have gone as far as they should in working with the livestock people to help them in controlling their fires, which they need. I think that they could go a lot further in that regard.

Of course, this is a general statement; there are exceptions. But both of them are very sincere and conscientious in wanting to prevent wild fires. The livestock people are as deeply concerned in most instances as the timber people in the prevention of wild fires because they have values at stake too. They not only have their ranches at stake, their fence lines, their livestock, but they also have their feed, upon which they are dependent. So they do have a mutual interest.

Fry: In other words, industry could help in providing standby funds in addition to those provided by the state?

Nelson: Yes, that's right. And a few of them have, under critical conditions. But I don't think as much as they should.

Fry: What companies have been most aware of this and responded most to this?

Nelson: I don't know as I can answer that. We've had some of that in the northern part of the state on the east side of the Sacramento Valley, up in the Shasta, Lassen, Tehema, and Butte Counties. There have been no outstanding examples of it.

Fry: That sounds like Colgan country. [Laughter] I just came back from there.

Nelson: Oh, you did? Yes, that's Dick Colgan's country. Of course, Dick is now retired, but I think it is safe to say that he was the first industrial forester to seriously apply good silivcultural practices in the management of company timber. He for many years was forester for the Diamond Match Company, Chico, California.

Governor Earl Warren signing the State Forest Practice Act (1945)

Above left: Governor Earl Warren signing the State Forest Practice Act, 1945.

Above right: State Forester DeWitt Nelson, 1947.

Below right: William S. Rosecrans, Chairman, California Board of Forestry (1943-1957)

FOREST PRACTICE ACT

Evolution of the Act

Fry: I'd like to ask you some questions now on the evolution of the operations of the Forest Practice Act. The first thing that I wanted to ask you is what you think the limits of California's Forest Practice Act should be. This seems to have been a continuous question ever since its adoption. Should it include fish and game management requirements, erosion and water pollution requirements, such as water breaks and skid trails, or should it concern itself only with the central issue of how many trees to cut?

Nelson: Okay, we'll take it this way. When the Forest Practice Act was initially conceived, it had no enforcement provisions; that is, like going to court or filing an injunction against an operation. It was taken on as an educational type of program, and the timber industry pledged their help in bringing recalcitrant operators into line. So our program resulted in providing an inspection service. Incidentally, we were given nine timber operation inspectors back there in the '40s, and we still have nine.*

Fry: You mean the staff of inspection has not increased?

Nelson: Correct. We have an average 1500 to 1600 timber operators licensed. It is impossible to give the detailed inspection that we should provide; however, we do enlist the services of many men in the organization other than these nine inspecting foresters. We use our regular fire control personnel, ranger, and assistant ranger personnel in this inspection program. It is too thin to get the results that we should.

Fry: Is this because you are hamstrung legislatively?

Nelson: We've never been able to convince the Department of Finance and the legislature that we should have more. One of these days we are

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*See Nelson's 1962 statement on enforcement, Appendix II.

Nelson: spend up to forty dollars an acre for correcting a situation or reestablishing a stand of trees by reforestation or whatever means may be required. So far, we have had no cases of this kind. This again becomes very involved in the legal procedures.

Fry: I thought you had had some litigation.

Nelson: We've had a number of litigations started. Most of them were corrected and settled out of court; so we accomplished the same purpose without getting into a court action.

Fry: Has any of this been involved with the larger members of industry?

Alternate Plan

Nelson: The case that came to court last month was with the Simpson Timber Company, which is one of the large redwood companies. It dealt with an alternate plan provision which they failed to file and get approval of by the Board of Forestry prior to their clear cut of a given area. However, technically this is the reason the attorney general's office refused to prosecute the case, because under one interpretation they were within the rules.

Here we have come to some of the ambiguities that exist in the law. We found in this case that there was a conflict within the rules themselves which has to be cleared up, and which will be cleared up.

Fry: This was an alternate plan which they failed to file?

Nelson: They failed to file for an alternate plan and went ahead and cut as if it were an authorized alternate plan. But they subsequently went in and gave the land the required cleanup and reseeded the area, as would have been required had the alternate plan been officially authorized.

Fry: In alternate plans, is there any question or difficulty in your office inspecting to find out if adequate precaution is taken to prevent erosion and promote regrowth?

Nelson: In our alternate plans, erosion is the critical problem, particularly in the redwood country, because there we have some of the steepest timber country with some of the state's most erosive soils. Combine these conditions with the high intensity rainfall that hits that country most every winter, and there is bound to be soil movement for the first year or so after clear cut logging. This can be

Nelson: more than 90 percent of all operations. The greatest number of violations are in the field of snag falling. In most cases we've gotten them to go back in and remove the snags. We have had other violations in the field of fire protection. We've taken a number of cases to court wherein we could exercise a misdemeanor charge under laws other than the Forest Practice Act, and we've gotten court action on them.

Fry: Then your main problem seems to be a continuing one of enforcement.

Nelson: Our main problem is a continuing one of, first, improving the rules in every way we can, getting the industry to accept those rules, improving the enforcement of the rules by voluntary action as well as legal action taken by the division. Inspection and enforcement will always be with us.

Fry: I think it was Emanuel Fritz, in a statement, who suggested that the operators be licensed and bonded. Was this ever seriously considered by the division?

Nelson: Oh yes. When we last revised the Forest Practice rules, we considered the bonding concept, and some of us tried to get the bonding concept approved. But we were unable to get it into the law.

Fry: Who opposed it?

Nelson: Some of the legislators and some of the industry opposed it. The industry opposed it in general and the legislators coming from those areas opposed it.

Fry: What about the problem of the operator being responsible but not the landowner? In other words, the gyppo who is--

Nelson: The landowner is now responsible. That was one of the amendments we got through. The landowner carries the full responsibility. We are hoping in this new review of Forest Practice rules to tighten up on the waterbreak problem in skid trails and in stream crossings. I hope we can get some improvement in that area in order to minimize debris and siltation of the streams. We have a responsibility for this, of course.

In past years the responsibility of any landowner, regardless of who he might be, or what his use of the land might be, was a responsibility to himself and maybe to his immediate neighbor. Today what one does on land here in Northern California, due to the transportation of water to Southern California, can affect somebody a thousand miles away. It can also affect other resources such as the fishery, particularly where we are concerned with the anadromous fish that come into the fresh water streams for spawning purposes.

Nelson: So the landowner's responsibility is increasing; that is, his responsibility to the general public. They are recognizing this very slowly. At the same time, I think the public is recognizing the landowner's problems and responsibilities even more slowly.

Fry: Another little innuendo I picked up, which you might want to comment on, is the attitude of the individual counties towards developing a good education on the Forest Practice Act and toward cooperating with the state. Have you had any problems?

Nelson: The Forest Practice Act preempts the field in the establishment of forest practice rules. However, in San Mateo County, and recently in Marin County, they did establish ordinances that apply to the cutting of redwood timber. These are in areas that have high subdivision and recreational values. They, the counties, tightened up the restrictions from a local point of view very much. Neither of these areas has a great deal of timber harvesting. San Mateo County does require a license of some kind.

Fry: Would this aid or confuse the state administration?

Nelson: Well, if every county established its own rules, it could be most confusing because instead of one set of rules there would be about twenty sets of rules.

Fry: Have you had any instances in the past of counties actually opposing the administration of the Forest Practice Act or the operation of the committees?

Nelson: No, not to my knowledge.

Promoters of a Forest Practice Act

Fry: We left you back here building up the Forest Practice Act, and it was passed. Would you like to point out any particular friends who helped in the passage of it? Maybe we could start with committee members. Which ones were the real pushers?

Nelson: Development and passage of the Forest Practice Act. Well, the committee, of course, was the prime mover of the legislation once it was introduced.

Fry: And they were all in agreement with the final draft?

Nelson: They were all in support of it. And they had the support of Mr. Dean, the director of Finance, and the support of Rolland Vandegrift,

Nelson: the legislative analyst. Through the hearings, and the work of Emanuel Fritz and Bill Schofield, and the leadership of Mr. Rosecrans, it went through the legislature without any great amount of fuss. I participated throughout its development and passage. It went through some amending processes during its passage through the legislature, but the basic concept that was introduced still came out when the bill was passed.

Now, there was another piece of legislation passed at this same time, again resulting from the studies carried on by the interim committee. And, of course, we should not leave Emanuel Fritz out of all this. Emanuel Fritz was in this whole process of developing the legislation and helping Senator Biggar. He was consultant to the committee itself. He was a committee representative, and he was a real force in the whole accomplishment.

Fry: This also included working with the various members of the legislature as the bill bounced back and forth.

Nelson: Oh yes, with various members, yes. We just about lived in the legislature that year.

Fry: I'd like you to spell out some of your activities, if it isn't just a big blur to you.

Nelson: Well, it is a blur, but I can cover much of it, for it was a most interesting experience.

OTHER LEGISLATIVE EFFORTS

Controlling Beetle Infection

Nelson: I can remember one thing. We got two more pieces of legislation through that year. We had a very serious infestation of bark beetles. The worst infestation was in the Burney Basin area of the Lassen National Forest, where there was a large area of privately owned land. The bark beetles were killing pine timber particularly; it was an infestation of epidemic proportions.

There was a law on the books that provided for the control of forest insects , but it required the state forester to advertise the situation for x-number of days; if the landowners refused to take control action, the state could move in and the cost of control became a lien against the property. The procedural process required so much time that the bugs would have flown from the trees before any control measures could be taken.

So we got a piece of legislation drafted that would authorize the control of insect infestations by the designation of a "zone of infestation" by the State Board of Forestry. This declaration authorized the state forester to enter into agreement with the landowners for control of the insects on a fifty-fifty cost sharing basis. Under that method we could move in aggressively and exercise control, provided we could get the cooperation of the landowner.

Fry; Somewhere I saw something about federal government assistance in insect control. Was there such an arrangement?

Nelson: Yes. The Forest Service had authorization to pay 50 percent of the control costs on intermingled private lands. The reason for this assistance is quite obvious--it would be a waste of federal funds to control an infestation on federal lands and do nothing with the intermingled private lands. I had used this authorization when I was supervisor of the San Bernardino National Forest. Since all the infestations were on intermingled government and private lands, the federal government carried 50 percent of the cost. Therefore, the state and private landowners carried only 25 percent each.

Fry: Before you worked in an area, did you have to have the agreement of 50 percent of the landowners before you could do anything?

Nelson: No. We had to have approval of 50 percent of the total landownership, not the individual owners.

Fry: Not the individuals. I see.

Nelson: In addition, we could use either cash money or in-kind for that 50 percent; the operators or landowners who did part of the control work were given credit for their time and equipment and thereby could avoid putting up cash money.

Fry: Did those of the 50 percent who might not have agreed have to share the cost, previous to the bill?

Nelson: Usually--well, previous to the bill, the only way we could work it out, if they wouldn't do it themselves, was to go in on an abatement of a nuisance action and place the cost as a lien against the property.

Fry: And you could.

Nelson: Yes. But the procedural part, going through all the legal steps, made it impractical. The law had never been used.

Fry: So then this cost sharing came along as a plan.

Nelson: Yes. I well remember you asking what were some of the legislative experiences. One that I remember was when I was testifying before a senate committee on this particular piece of legislation. It was one of my first appearances before the committee, and I got carried away with myself. I gave them the full treatment. When I came back to my seat, Rolland Vandegrift, legislative analyst, was sitting beside me. He said, "Swede, you damn near talked yourself out of that one. The technique here is to speak as little as you can and don't talk too much." That was one of the best pieces of advice that I ever received, I think.

Fry: Because you're saving your ammunition?

Nelson: No, the idea of giving too much information is taking too much time. You see, the committees are crowded for time, and they expect you to make your pitch, make it short and to the point, answer any questions in the same way, and get out of there. That's it. That's good advice, whether you're before a legislative committee or any other type of a group. When you've made your sale, sit down. So that was a bit of good advice. As someone has said, "Stand up, speak up, and shut up." That was another piece of legislation we accomplished in 1945; '45 was a productive year.

Fry: I remember reading in the committee report the grave warnings about insect infestation and how it was damaging and killing six times more than fire did. Was this something which your office was able to bring the committee's attention to?

Nelson: Yes. And here again we had help from Paul Keen, the entomologist for the Bureau of Entomology. We drew on all the expertise that was available, and they were all very helpful. It was a case of getting all the help we could from the experts. We've done a lot of insect control work since that time, as well as blister rust control.

We still are having severe insect losses and will continue to until we can find some type of biological controls or better chemical controls that don't have the serious and long-lasting side effects of DDT and similar chemicals. Fortunately, many infestations are cyclical in nature. Trees too are like people--they have a life expectancy, and they are exposed to many hazards such as insects, diseases, fire, flood, wind, etc.

Fry: This bark beetle has been with us for a long time. Is there a lack of emphasis on research for this?

Nelson: No, there hasn't been enough money available for adequate research. They're moving into it a little stronger now; we're putting up a little bit of state money to the experiment station and the University to help the research in this field. In some ways it looks as if they may be reaching some breakthrough points.

Fry: I was wondering if you get more public support for such things as fire research than you do for this, which actually is more widespread but not so spectacular.

Nelson: We still don't have much money in fire research, either. Our total research budget only amounts to about $175,000 or $180,000. We pool that with the experiment station and the University and others. We are not a research agency ourselves, so we work together on these projects and pool our resources with research organizations. We've had some pretty good success in many areas.

One of the most spectacular successes, I think, is in the field of retardance in fire control, particularly where we're using the air tankers. This has been a result of combined research with industry, the experiment station, and ourselves. We're cooperating in many areas, both in research and experimentation.

Controlled Burning Program

Nelson: I'm getting away from 1945. We still have one more item. This deals with the so-called controlled burning program. Here we had a very delicate problem with a tremendous amount of demand from the livestock interests for the use of fire in clearing brush lands and improving the productive capacity of the ranges. Here again, we got some legislation enacted which authorized us to work with the livestock interests and the landowners in controlled burning. This legislation gave us authority to provide advisory services and to issue permits for controlled burning for range improvement purposes.

The law established some broad standards that the landowner must follow, such as constructing the necessary control lines in advance and providing all the equipment and manpower for conducting the burn. In addition the law authorized the Division to provide standby crews during the burning, but to help only in event the fire should escape. The purpose of being available was to help protect the neighboring property from serious damage. The permittee is not relieved of any liability that may result from his use of fire.

Fry: Up to this time, were there no permits issued, or were the permits issued by the county?

Nelson: There had been some permit burning. Most of it, however, was done in a very informal way. As a consequence, we had a great many incendiary fires set for the purpose of burning off the brush for improving the range for livestock and wildlife. It's the only way they could get away with it. The committee figured that we'd better provide a legal means by which this could be done under permit and under supervision.

I think I have previously mentioned a meeting I had with representatives of the Woolgrowers Association on this subject in Ukiah. We finally got passage of the range improvement legislation that year, which permitted the use of fire and provided a legal means whereby we could issue permits and supervise the burning operations.

Fry: It still isn't clear to me if this was passed in spite of them or if you managed to get some support from them and their counties.

Nelson: Oh yes, they went to work with us right away. The ranchers wanted some form of legislation. Once we were able to hammer out some of the general principles that would serve as guidelines, they were with us. It was rough hammering, though. Then I was confronted with the problem of how to get the show on the road.

Nelson: Well, it so happened that another old friend of mine from the Tahoe National Forest was retiring that year--Leland Smith. Leland had spent his life in the range business. He knew the cattlemen and sheepmen pretty well all over the state. He was highly regarded and respected. So I was able to hire Smithy (Leland Smith) to work with the livestock people in initiating this program and working out some of the methods, techniques, and regulations that we would apply. He did a very, very fine job, and we got the cooperation of most of the ranchers. The ones who were particularly good were some of the most difficult to start with. They were from the middle Sierra country--Calaveras, Madera, and Fresno Counties.

There was one old-timer by the name of Johnny O'Neil in Madera County who was the biggest and best burner in the country. When we worked out our program and laid down some rules of the game, he was one of the staunchest supporters we had. That group down there created a range committee that still is active, and they do the best job of handling their controlled burns of any area in the state of California. There's another group in San Luis Obispo and Santa Barbara Counties which is doing an excellent job. Our biggest problem still lies in the north coast area. Up there the ranches are rather far apart, the country is extremely rough, and they don't seem to be able to get together in a well organized program of helping each other on their respective burns.

Fry: You don't have a range improvement committee up there?

Nelson: They haven't been able to organize one. It's a different type of people. However, in recent years there is being a change; we are losing some of the old-time burners by natural attrition and new people are moving into the area. The problem isn't as difficult as it used to be. Also, there's a greater recognition of the value of timber.

Fry: Seems like your range burning came to a peak in--I can't find my date here, but I think it was about 1952.

Nelson: Yes, right about that time.

Fry: And then it began to diminish.

Nelson: It did peak in there. It started out very, very strong. There are a combination of reasons why it has diminished. One of them being that the returns on general broadcast burning just aren't as great as they had visualized it would be.

Fry: Are you talking about returns for grazing or for timbering?

Nelson: For grazing. The value of the feed that they got from some of the burns wasn't commensurate with the effort and expense that they put

Nelson: into them. In other areas, they have developed within themselves, along with our range men, techniques of treating the land mechanically, such as mashing the brush down with bulldozers or dragging big anchor chains between two dozers and then letting the brush dry for a period before burning it during a safe period of the year, and then reseeding.

That's where we get the best success--where they use a mechanical method to clear the brush, let it dry, and then burn it. If they burn it under safe conditions and then reseed it, they get much better results; they don't have nearly as much resprouting of the brush. You see, brush begets brush. Burn a brush field off, and where you had one stem before burning, the sprouts come up. I've counted them as high as twenty-five and thirty sprouts from one stump. It's just a matter of a short time, if you don't follow it up with more control, that you are right back where you started. So the ranchers are becoming more selective in the soil types that they are spending money on so that they get some real value from their time and money. Many of them are going back in and spraying, chemically spraying, the sprouts so that they hold the brush down. It's a continuous management process; it's not a job you should do with a nickel box of matches. Many of them are becoming aware of that. More and more we're getting mechanically cleared areas which are then reseeded.

Fry: The emotional influence has died down a bit, too?

Nelson: A considerable amount, yes.

Fry: Although I guess you had it the whole time you were in office as state forester.

Nelson: Oh, we had it. We still have it. We have some groups who are terribly emotional about it. There's only one thing that will cure them and that's when the pearly gates close behind them.

Fry: These are your north coast men?

Nelson: Yes, in large part. A year before last, on advice of the legislative analyst, the legislature struck from our budget the authorization that we have had all these years for your range improvement standby crews. That has been an unfortunate thing.

Fry: Why?

Nelson: He thought he could save about $49,000 in the budget by striking that out, and the senate subcommittee on finance went with him and struck these crews from our budget. The worst results of this have been again in the north coast area, where we needed that additional support. Because this is a policy determination by the legislature, we cannot put it back in future budget requests. But we are in hopes that some

Nelson: of the livestock people will be successful in getting some legislator to get it back in the budget. There's been a lot of support for that type of action.

Fry: They really want it.

Nelson: They really want it and they really need it. It's still a going program. It's become more tightly controlled. One of the problems and one reason why it has diminished in many areas is the liability that goes with it if a fire escapes and burns somebody's property. If that property owner can establish the fact that there was negligence, he can get some pretty substantial damages. There have been a few cases where that has happened, which has made a lot of them gun shy. There have been a number of attempts made to get legislation which would relieve the rancher of the liability. I don't think such legislation would be constitutional. If the liability factor were eliminated, we could have some very severe problems.

Fry: Along with this 1945 legislation, did you also increase your enforcement procedures on things?

Nelson: We got a pretty substantial increase in our fire protection organization. Not very much in law enforcement.

Fry: I was thinking of law enforcement.

Nelson: As I recall, we didn't get any addition in law enforcement, but we were successful in getting material increases in our fire control and protection organization, with a little bit in the prevention field. We never have had the budget we should have in prevention and law enforcement. We're on a big push now under legislation that was enacted in 1963 which gives us the responsibility for requiring hazard reduction around structures, industrial plants, and power lines. So far, we haven't been able to get the budget sufficient to really enforce these laws. We have developed a fire prevention plan. If we were to implement the entire plan, including education, hazard reduction inspections, and law enforcement, it would cost in excess of $6 million per year. This year we have a half million dollars in the budget for implementing the program.

Fry: I was told by someone that when you first came in, back in the early days of 1944 and shortly after, that there was a redefinition that occurred so that fire prevention, on one hand, became one activity, and fire protection became another activity.

Nelson: We got some broad legislation in that field, yes. But most of our budget was directed to the control phases.

Fry: But this made a difference in your staff organization, didn't it?

Nelson: Some, yes. But it was not very heavy on the prevention side. We got a few fire prevention officers and a few patrolmen, but it was a pretty weak force. We did get some very substantial increases in fire equipment, tankers, bulldozers, and transport trucks for the bulldozers. We acquired in one fell swoop fifteen or twenty surplus military transport units that we converted in our own shop for hauling bulldozers. We bought bulldozers for each one of these units. We really got into mechanized operations, as well as pretty good manpower to go with it.

I remember I was before the senate finance committee one day and one of the senior senators, Senator Ralph Swing of San Bernardino County, whom I had known casually over the years, had not arrived at the hearing. Rolland Vandegrift, the legislative analyst, and I were not in agreement. I was asking for a substantial increase in the budget--I've forgotten what the item was--and Rolland Vandegrift was opposing my proposal. Van and I were at the high point of our discussion before the committee when Senator Swing walked into the room. He immediately sensed that something was amiss and asked, "What's the matter here?" The chairman of the committee told him that there was a difference of opinion between Swede Nelson and Vandegrift. "Well," Senator Swing said, "anything Swede Nelson wants, Swede Nelson can have." And it went through. But there, a friend of mine did me a great injustice in trying to help me because Vandegrift and I had difficulty from then on; Vandegrift had been cut down in public, and it strained our relationships from that day on. So you can befriend a friend too greatly in public places.

Fry: Yes, by slapping down his enemies so that they are defensive.

Nelson: Yes. Vandegrift had had a long career, and he was a dynamic force in the legislature. He was a brilliant man. He could sell or kill a program like nobody's business. Fortunately, we had been able to work together for a long time until that happened; after that, our relationship was always strained.

Fry: How much longer was he in office after that?

Nelson: Vandegrift died, must have been about '49 or '50. It was quite a while ago.

Fry: Anyhow, he was your budget supressor there for quite a while.

Nelson: That's right. He dealt me a few bad blows after that. But there again, that's part of the game, the way it's played.

(COPY)

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Save-the-Redwoods League

TREASURER: DR. ROBERT G. SPROUL UNIVERSITY OF CALIFORNIA BERKELEY 4, CALIFORNIA

OFFICE OF THE SECRETARY · 114 SANSOME STREET, SAN FRANCISCO · 4

April 25, 1963

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OBJECTS

1. *To rescue* from destruction representative areas of our primeval forests.
2. *To co-operate* with the California State Park Commission, and other agencies, in establishing Redwood parks and other parks and reservations.
3. *To purchase* Redwood groves by private subscription.
4. *To co-operate* with the California State Highway Commission, and other agencies in assuring the preservation of trees and roadside beauty along highways.
5. *To support* reforestation and conservation of our forest areas.

Hon. DeWitt Nelson, Director
Department of Conservation
State Office Building #1
Sacramento 14, California

Dear DeWitt:

We may be wrong, but it appears to some of us that the Achilles Heel of your proposed revision of the Forestry Code (SB 565, AB 958) lies in the retention of the "alternate plan" provision.

We all know what happened south of Prairie Creek. Even the lumber industry looks askance at it.

Will follow this legislation with interest. More power to you.

As ever,

Newton B. Drury

NBD:bc
Enc: AB 958 and SB 565

cc: Dr. Chaney)
Mr. Greig)
Mr. Birmingham) with SB 565
Mr. Leonard)
Mr. Brower)

Mrs Frey - 4-14

Alternate Plans and Conservationists

Fry: Can we discuss more about the alternate plans and some of the private interests involved?

I ran across a letter that Newton Drury wrote to you on April 25, 1963, as head of the Save-the-Redwoods League. At that time, there was a proposed revision of the Forestry Code. He said, "The Achilles heel of your proposed revision lies in the retention of the alternate plan provision. We all know what happened south of Prairie Creek; even the lumber industry looks askance at it." I wondered if this meant that there was a reaction of conservation organizations to throw out the whole idea of alternate plans.

Nelson: There was, and the most unfortunate thing that ever happened was when the Arcata Redwood Company clear-cut that piece of land on the side of Highway 101. That action caused more problems to forest practices and to the industry than any other single act. The timber industry has been split wide open by that action of the Arcata Redwood Company. The Pacific Lumber Company of Scotia has been particularly critical of what was done.

Fry: You mean they don't agree among themselves?

Nelson: No. Most other operators have really damned Arcata Redwood for their action. The alternate plan provision is of vital importance to the forest practices rules because there is no single prescription by which you can harvest any and all timber. Under the provision of the alternate plan, the alternate must be equal to or better than the rules for which it substitutes. It is under this program that we have gotten the reseeding or the replanting of over 100,000 acres in the redwood and Douglas fir region. That is reestablishing a new stand of timber much faster than if we had relied on seed trees and Mother Nature to restock the area.

DeWitt Nelson and Floyd Waklee
Fire map during critical fire period of 1965

ESTABLISHING A NATIONAL REDWOOD PARK

Where and How Much

Fry: What about a redwood national park? Do you think one will be established?

Nelson: Oh yes, I am sure a redwood national park will be created. You can't have as much public pressure for something of this kind without getting some positive results. It is easy to read the attitude of Congress. The only question is--whereabouts and how much.

In the state park program, we have about 110,000 acres of redwood parks, about 60,000 acres of which are old-growth virgin stands. About half of the remainder is a mixture of old-growth and second-growth, and the balance is second-growth. How much do we need? The cream of the crop is already in state parks.

The Department of Parks and Recreation, with the help of the Save-the-Redwoods League, has established a magnificent redwood state park system by using both state funds and contributed funds gathered by the League. True, they need some more to round them out and to buy the interior holdings that are still in private ownership. They need some open land that can be used for camping, picnicking, recreation, and administrative facilities. Camping and picnicking under those big old redwoods is not the best place. It's cold and damp and a lot of "widow makers" are hanging overhead. The legislatures are studying this problem at the present time, both at the state and federal levels. Public hearings are being held on the redwood national park proposal.

Next week, on August 17, a subcommittee of the Assembly Public Works and Planning Committee, chaired by Assemblyman Charles Warren, is holding a hearing in Berkeley, in Mulford Hall, on the Forest Practice Act and its administration. This and other hearings will relate to the redwood park issue. This is to be followed by two days' examination in the field--so who sets up the field trip? The Department of Fish and Game, and the Department of Parks and

Excerpt on Forest Practice Act Revision from the minutes of Sierra Club's Conservation Committee, February 17, 1966:

FOREST PRACTICE ACT

Ben Cummings remarked on his attendance at a hearing called by the Redwood Forest District to review amendments to the laws for that district under the Forest Practice Act. Several amendments were offered pertaining to erosion and to water pollution; for instance, one called for cutting not closer than 50 feet to any stream, which was struck down as "not pertinent" and another which would limit slopes of not less than 5% grade was also declared not pertinent. He later reviewed the Code of the Forest Practice Act and stated there was nothing contained about erosion or water pollution and thus at this hearing these were not considered. He was disturbed by the fact that these were timber operators standing in judgment on the revisions. The various forest districts are holding hearings soon:

South Sierra Forest	March 21 in Sacramento
Redwood Forest District	March 24 in Santa Cruz
	April 21 in Ukiah
	May 26 in Eureka

The Natural Resource Committee has appointed an Interim Committee which is working on recommendations for changes in the Code and Phil Berry is working on this aspect of the Act. We will try to have representation at the individual forest hearings for observation and recommendations can be developed later.

Nelson: Recreation, without any contact with Forestry! We have departmental as well as philosophical conflicts. They are looking at only one side of this issue, again prodded by the emotional appeals. My concern is that our legislative bodies are more responsive to the emotional appeals than they are to problems of people and communities. They do not understand any better than many of the people the dynamics of nature. Our problem is to get the facts over. Facts don't have the appeal and don't make the headlines like emotional statements do, so we have some real problems ahead of us.

Conflicting Views of Forest Management

Fry: Where is CFPA in all this, and influence patterns that have been set up over the years?

Nelson: The California Forest Protective Association and the California Redwood Association are right in the middle of this. They are representing their constituents, their points of view, their interests, their responsibilities, just like the preservationist groups are doing from their point of view. We in the Department of Conservation and the Division of Forestry are presenting our point of view. We are in the middle--in the crossfire.

If you read the August issue of the Sierra Club magazine, there's a story in there by Alex Calhoun of the Department of Fish and Game on the depredations of logging, with a number of pictures damning foresters and forest practices. I hold no brief for the timber industry on some of the actions they have taken. The management levels of many corporations seem to be insulated against public opinion; they seem to ignore the trends of society today.

Fry: You mean they really don't feel on the defensive here?

Nelson: They are completely on the defensive, but they should be on the offensive; by offensive, I mean by improving their actions on the ground. If they had sensed what was happening, and we have told them year after year that they had better improve their actions, they wouldn't be in the position that they are today. Fish and Game wouldn't be able to show the pictures that they are showing of plugged-up streams with silt, logs, and debris. No, the industry isn't clean by any means.

Just last Friday, I looked at a series of motion pictures taken by the Fish and Game Department for showing at this hearing next week on stream damage by logging, both in the pines and the redwoods. They weren't good. The industry should have done a much

Nelson: better job--and many of these situations were done by major units of industry. They should have kept the roads further away from the streams; they shouldn't have tried to get every usable tree out from the stream banks; they could have left some barriers--a few trees, anyway. But they didn't.

I refuse to take the whole blame for this, from a forestry point of view, because the Department of Fish and Game have laws also which authorize and require them to go to the timber operators and work with them on the location of their roads, on the location of their stream crossings, and to take the necessary enforcement action if this cannot be worked out. They have not carried out their legal and statutory responsibilities. We give them copies of all logging permits and all logging locations that we receive. They have the same opportunity to work with the industry that we have. So far, I can find no case where they have done this. In fact, their enforcement laws are stronger than ours. They have, in a few instances, brought legal action against a company that was unaware of what was going on until they found themselves in the district attorney's court. When that happens, the district attorney has invariably questioned why Fish and Game didn't go to the operator and work out a solution in advance. In most cases, the district attorney has told them to go back to the woods and clean them up with the authority that they have in the law, and refused to take action in the court. So Fish and Game, while they're passing the buck to Forestry, are not clean, by any means. This by no means justifies careless action by the industry or lack of full enforcement within the limits of the law on our part. I know that our laws and our forest practices rules must be strengthened.

During this period, we have gotten amendments to require water breaks in the skid trails, to require care in stream crossings with logging roads, and we have made some progress in getting less stream damage caused by debris in the channels. Fish and Game has worked with some of the operations in getting them to go back into the channels and clean them up after the logging operation. This isn't always good because you still have a lot of silt left in the channel, which does destroy the spawning beds for a period of time. There are some real problems here that have got to be solved. The ultimate solution will be prevention of stream damage by better road location, better erosion control, and leaving some vegetation along the stream banks.

We are now reviewing all of our forest practices rules in relation to all of these problems. I hope we can come up with some solutions to them, but there are no simple answers. The Fish and Game Department and the Sierra Club are recommending that there be no logging within fifty feet of any of the streams. Well, that's good, but it's tantamount to confiscation of an individual's property, and some of our best timber grows on the stream bottoms. As you know,

Nelson: that is where our major groves are--in the lowlands, where sediment is a source of good soil. Every one of our major redwood groves is in areas that have been subject to floods and heavy siltation down through the ages. Dr. Paul Zinke of the University [of California] has thoroughly documented and established this fact by his studies in the redwoods. His studies show that over the last one thousand years, in the Bull Creek area there have been fifteen major floods that have deposited many feet of sediment; that is where we find our big redwoods.

The 1964-1965 flood at Bull Creek exposed a log which was buried in sediment. The Department of Parks and Recreation sent it to the University for Carbon-14 dating; it was nine thousand years old. So there were floods way back when. Redwoods seem to thrive under those conditions. They have the ability to throw out another layer of roots in the new sedimentary deposit. The redwood is one of the most persistent trees we have.

Fry: I don't understand why the Fish and Game Department is reversing the usual procedure of state agencies, and that here they are trying to pass the responsibility to another agency instead of increasing their domain.

Nelson: Except for one thing: It's a tough problem and they're trying to pass the buck. They say their laws aren't rigid enough. They have the same process of improving their laws that we have, and that is through the legislature. It will probably come out in the hearings next week. I hope so.

Fry: Is it a matter of using funds they have and not wanting to increase their field staff?

Nelson: I don't know. They seem to have plenty of field staff to go around and take pictures and show all the bad stuff. When I looked at that forty-minute film of depredation that they showed me last Friday, I said, "You're taking this entirely from a unilateral point of view. Everything isn't that bad, I know! Haven't you some pictures that show a good operation?" He said, "We can't get pictures of that because the cover around the streams is so heavy that you can't take photographs of it that show anything." Anybody can take a picture of a wide open country; but it is difficult to take a good picture of a heavy stand of forest or alder or brush, or whatever the stream canopy might be, particularly if you don't want to make a balanced presentation. So here again I charge "innuendoes and half-truths!"

Fry: How long has this been going on with Fish and Game?

Nelson: It's been going on for too long. We've had our dog fights in this, and we're going to have some more! [Laughter]

Fry: It seems like I remember in the original bill in 1945 on Forest Practice Act that this was put in and taken out as the bill progressed.

Nelson: There was a lot of put-in and take-out. There was again in 1961 or '63--when the last amendment was made, Fish and Game tried to get Fish and Game written in this law. The legislature and the people wouldn't buy it. The legislators are responsive to the articulate people, and we spent many hours in conference with the legislators and hours in public hearings before legislative committees when these last amendments were made. This is what the legislature came up with. No, it isn't going far enough either in Fish and Game or in Forestry. It's going to go further, but it will have to evolve; it will take time, education, and understanding. Nothing changes overnight.

Fry: Has this Fish and Game element been one of the major obstacles in evolving your forest practices?

Nelson: No, they are unwilling to go part way at a time, it seems. They want to go the whole way all at once. After all, people being people, it just doesn't work that way. When we get a reapportioned legislature, I don't know whether we'll have a strong timber industry or not, because the legislature will come largely from the metropolitan areas. They will be responsive to constituents that do not understand the resource problems, whether it is forest, mineral, or agriculture. They just don't understand, and the legislature is going to be responsive to those groups. The emotional appeal is going to be stronger than it has ever been. It can be a damaging thing to the timber economy, even the mineral economy, of the state of California.

Fry: I've wondered about that--if it's going to be more responsive to recreation needs.

Recreation as a Priority in Forest Management

Nelson: Oh yes; recreation is a popular thing today. Nearly every legislator has a bill for bigger and better legislation dealing with parks and recreation. Here's another thing. They damn the landowners, whether they are ranchers or timber people, for not moving in to the recreation field. The owners have problems there. There are problems of liability. If you invite, through any means of providing a campground or putting up a sign, "This country open," and somebody goes out there and has an accident, you can be sued. You become liable for their actions. So there are problems in that regard.

Nelson: The public has responsibilities in this field. The reason there are "no trespass" signs all over the country is because of the manner in which the public conducts themselves in vandalism and littering and carelessness with fire. Nobody wants them on their property. I don't blame them. So the public has got some responsibility if they are going to be permitted to use these private lands.

At the same time the public, through the park programs, both federal and state, have preempted the field by providing recreation facilities at cut-rate prices, to a point where private industry can't compete in providing campgrounds and picnic grounds. Some have tried it and lost their shirts. So it isn't simple.

Fry: I was wondering if some of the big corporations, in response to the threat of a very large redwood national park, would open their lands to recreation. But there is a problem here because of the cost involved and their responsibility to their stockholders.

Nelson: Right, but they have already opened to public use, for camping, picnicking, fishing, swimming, and hunting, some 260,000 acres of their redwood lands. They hope that the people will conduct themselves in such a way that they can continue this.

Six of the major companies have established what they call demonstration forests, where they provide facilities for the public to go in and see how their lands are managed and how the trees grow and reestablish themselves. So far, it seems to be working pretty well; I hope it does. But the industry should have started that ten or fifteen years ago. Unfortunately, they're being forced into it as a countermove against the national park program. So both the industry and the public have some real responsibilities in this area.

Among other things, I should mention [the following] while we're talking about this problem and Fish and Game. This is by Fish and Game's own written statements. The only place where we are improving or getting improved wildlife habitat for deer and mammals is in the logged-over country. Here's where you produce new food and good habitat conditions for wildlife. You don't find much feed under old-growth timber stands, particularly in the redwoods and Douglas fir. So here is another thing that is not being admitted publicly or recognized as it should be. Certainly it is not included in their propaganda.

Fry: You feel this hasn't come out in the hearings?

Nelson: It hasn't so far. I'm hoping to bring it out next week.

Fry: Are you going to testify?

Nelson: Yes. I have prepared a statement in which I have set forth some of these philosophies. I have not prepared a statement on some of the things I've more or less charged against the Department of Fish and Game here. However, I will be prepared, depending on the nature of their testimony.

Fry: Call your other gun? You'll have it with you?

Nelson: I'll have it with me.

Save-the-Redwoods League

Fry: What about the Save-the-Redwoods League?

Nelson: Yes. Before we leave the redwoods, I want to make a statement about the Save-the-Redwoods League.

So far, the Sierra Club, of which I have been a member for over thirty years, has made a lot of noise and generated a lot of heat about the redwoods. However, they haven't yet produced a redwood tree or a redwood park--state or federal.

In the meantime, the Save-the-Redwoods League has quietly gone about its business of gathering contributions to the extent of many millions of dollars. With this money, they have purchased directly, or in cooperation with the state on a matching basis, many thousands of acres of redwoods. It has been through their efforts that the people of California now have over 110,000 acres of redwood state parks, of which over sixty thousand acres are the choice virgin redwood groves.

The League was formed by a few farsighted citizens in 1918. Newton Drury has long been their executive and is largely responsible for their tremendous success. For the period when Newton was director of the National Park Service and chief of the state Division of Beaches and Parks, his brother Aubrey served in that capacity. After leaving state service, Newton returned to his first love--that of buying more redwoods for posterity. The people of California and the nation owe a debt of gratitude to Newton Drury for his untiring efforts to save the world's choice groves of redwoods.

Fry: In the Forest Practices Act, under the conversion provision, is there anything that you can do to get a timberland owner to conform to the provisions in his affidavit? Is there anything you can do to get the provisions in his affidavit to conform to what you would consider a public interest if you felt that he was going too far or if there were too many conversions being made?

Nelson: Well, this is another elusive problem. Under the provisions of this section of the law, one can, by filing an affidavit that he is going to convert his timberland to other land uses, then clear-cut it and make that conversion. I have tried a number of times to get this modified, but here again we run into constitutional problems. Under the Constitution, a man has the right to use his land about as he pleases, as long as he doesn't impinge upon his neighbor. We require an affidavit. We cannot require, by any means we've been able to design, a provision by which a man can't change his mind and not complete the conversion as declared. I'm sure there have been some instances where this has been used as a subterfuge to clear-cut timberland. However, in most cases, it's been very marginal timberland, and in most cases the conversion has been for grazing purposes. A high percentage of these cases have not resulted in completely cutting over the land that they requested. There have been, as I recall, close to 800,000 acres cut over in this conversion process, but the bulk has been on the marginal timberlands for grazing purposes. There doesn't seem to be as much of this as there was a few years ago.

Fry: Do you think that this needs to be tightened up any?

Nelson: I have worked with the attorney general's office personally, and so has State Forester Raymond, trying to figure a provision whereby it could be tightened up, but we have not been successful to date.

PRIVATE FOREST OPERATIONS UNDER THE FOREST PRACTICE ACT

Individual Companies

Fry: I have here a sort of $64 question. I was wondering if you could give your candid opinion of forest operations over the years of some of the major companies. I'll list these companies, and you may want to just pick your own. I just chose these more or less at random. How about McCloud River Lumber Company, Red River Lumber Company, Diamond Match, Michigan-California, Arcata Redwood, Pacific Lumber Company, and the Union Lumber Company?

Nelson: Okay. We'll take them one at a time. The McCloud River Lumber Company. The town of McCloud is situated at the foot of Mt. Shasta on the southeast side. The company's home office was in Minneapolis, Minnesota. They were a good company. They owned a good block of timber, had cutting rights to some timber owned by the Red River Lumber Company, and they purchased considerable government stumpage. Not long ago, they were purchased by the U.S. Plywood Company, which is also located at Anderson, California.

The Red River Lumber Company held a small empire. Their lands were acquired in the early days under various federal land grant laws. Like most pioneer companies, they went through a period of exploitation, which was subsequently modified to a good management program. This was a family holding with all kinds of interests. Some years ago, they liquidated it as such and reorganized it into the Shasta Forest Company, of which Dick Colgan became the first manager. At the time of Dick's retirement, Bill Beaty took over the management. They had some 700,000 acres of timberland intermingled with some good mountain meadows with good grazing values. Under the "Shafco" organization, they are doing a good job of management. Their land manager sells the timber stumpage under methods somewhat comparable to Forest Service sales. They are very concerned with maintaining a continuous crop of trees, and they are improving their meadow lands to increase the carrying capacities for livestock.

Nelson: The Michigan-California Lumber Company has done an excellent job. They were the first tree farm established in California, and they had one of the most progressive forms of management. Swift Berry was their general manager for many years. He was a graduate of the Biltmore School of Forestry, the first forestry school in the United States. After his retirement from the company, he was elected to the state senate. About two years ago, this--again in a family operation--sold out to a newly-created company, and their form of management has changed considerably since then. In order to meet their purchase costs and interest payments, they are having to cut more heavily than was done under the original ownership. Just how this will work out, I don't know. They are dependent in part on Forest Service timber. I think they have about eighty thousand acres of their own land.

The old Diamond Match Company was the first California company to start planned forest management, as far as my knowledge goes. Dick Colgan was the forester. He instituted many fine forest management procedures and methods. I think they owned about 200,000 acres. In the '50s, Diamond Match merged with a packaging organization--I don't recall the name--which continued the program of intensified forest management. This firm then merged with a lithograph organization and is now known as Diamond International. When this merger took effect, there were a number of policy changes in the manner in which they managed their timber resources. I have not been happy with some of the changes. I am informed that they have accelerated their annual cut quite severely.

Fry: What do you mean, increasing their annual cut severely?

Nelson: By increasing their annual allowable cut. Just how this will work out, I don't know. They now seem to be stabilizing somewhat, and my guess is that they will swing back to a more balanced and improved management program because they have a $40 million or $50 million plant investment in Red Bluff which they need to protect.

You asked about Arcata?

Fry: Yes, and it might be a good idea if, along the way, you would mention the names of foresters or people in the high executive branches of these companies.

Nelson: Good. You asked about Arcata Redwood Company. Here Howard Libbey is the motivating force. They have a fairly good sized piece of redwood land, north of Arcata near Orick. It is held by a company of individuals, but Howard Libbey is the strong man in regard to managing the property. They have done a lot of pioneering. We worked with them back in the '40s on experimenting with selectively

Nelson: logging their redwood. They did a beautiful job of marking and logging. But every winter they would get heavy windstorms which caused severe windthrow of the trees that were left. When these trees came down, they inevitably fell across stumps and splintered and shattered. They would pop open like a watermelon. Their losses were heavy, and they had to go back in and log the salvageable timber out. In doing this, they tore up the young growth that was coming in.

This went on for about ten years. They finally decided that in this particular area they just couldn't leave seed trees or do a good selective cutting job because those trees were windthrow prone. They, the trees, had been relying on each other to hold them up for too many years. That is really what caused Howard Libbey to clear-cut that piece of land along Highway 101 back in the late '50s and early '60s. That logging operation is what blew the cork out of the bottle and created all the emotion demanding that "no more redwoods be logged." That's the cut-over picture of devastation you see in so many publications.

Fry: In more serious considerations of this, I think I was talking to Professor Zinke and he had some grave reservations that they had adequately prepared the soil to receive the redwood seeds. He said that in some places where clear-cutting would not be advisable as good forest practice (such as on steeper slopes, things like this), that they had gone ahead and clear-cut the whole area. In some terrain I suppose you could do this.

Nelson: In some of that steep terrain you get some soil movement, of course. But if you adequately waterbreak the skid trails, it's not too bad. This was the first area in which we tried the reseeding program. The seeding has proven to be very successful. There's one thing about getting regeneration of timber, whether you're talking about redwood or Douglas fir. You must have bare mineral soil for the seeds to land on in order to germinate and reestablish themselves. You have to have bare soil and this, of course, is subject to erosion.

So, it is a difficult problem. But that country comes back fast; you might have some erosion for a year or two, but ordinarily between the fireweed, brush, and the trees, you soon have a pretty good cover on the land. Mother Nature is very persistent in establishing a cover of some kind on bare land.

Fry: Primarily that particular operation, its contribution to history is one of changing public opinion. [Laughter]

Nelson: That's right; that crystallizes it, I'm afraid, and it's been a source of public emotion and concern ever since.

Nelson: Arcata, under Howard Libbey's leadership, was one of the first companies to establish a salvage sawmill. In the redwoods particularly, there is considerable material in the form of chunks, long-butts, and culls ordinarily left in the woods because it is not profitable to process it through the primary mill. To utilize this material, Libby built a small mill near the woods, salvage logged the material that was formerly left in the woods, and processed it into merchantable products. This stimulated several other companies to do likewise. This is good utilization and cleans up the land.

Fry: What about the Pacific Lumber Company?

Nelson: Pacific Lumber Company is another progressive company. They're doing a good job of logging. They have been in business for over one hundred years. Stanley Murphy was their president until recently when he prematurely died of a heart attack. In the old days, before there was adequate transportation in that north country, they lived in their own environment, their own way of life, and they provided their own meat for the logging camps and sawmill town of Scotia.

So when the Pacific Lumber Company, as did many of the other companies, finished cutting an area, they would burn it in an effort to convert it to grass, in order to provide range for their livestock. However, they finally found out in the '30s, and particularly in the '40s, that you just can't convert the pure redwood and fir land to good grazing land. If you kept on burning it, you'd have nothing but brush, and ultimately the trees will come back. So they finally went out of the livestock business, and that land is now recovering and growing trees. Since then, they have been following a general policy of selective cutting. They have been able to do this because their area is less susceptible to windthrow.

Kenneth Smith, who was the company treasurer, and I were talking in his office one day. I was working on the acquisition of a parcel of their land along the Avenue of the Giants for state park purposes (which was subsequently acquired). I've forgotten the acreage; it was something less than two hundred acres, as I recall. But I do remember we paid $1,200,000 for it. In the course of our conversation, we got to talking about forest practices and the possibility of continuous forest yield for support of the timber industry.

I told Ken Smith that it just had to be, that they could grow trees on their cut-over lands and the company would stay in business continuously. Well, Ken reached into his desk drawer and pulled out two cigarette boxes full of redwood seed which had been coated with a fertilizer. He said, "Look at this. We have spent a lot of money in recent years trying to reforest fifty thousand acres of our land,

Nelson: most of which had been burned over frequently, and we haven't yet developed the technique. I'm not so sure you're right that we can get a second crop of trees here."

I said, "Ken, just because you're spending money and trying to develop a technique and method by which to reestablish the forest is proof to me that the Pacific Lumber Company is interested in a continuous operation. Between your work and that of others and ourselves, we're going to find a method by which it can be done." We have found that method now, and I think they are in business for a long time to come.

The Pacific Lumber Company was one of the farsighted companies. On both sides of the Redwood Highway, they refrained from logging. Ultimately, they sold this and some of their choice bottom land timber to the state and Save-the-Redwoods League for state park purposes. This protected roadside strip is now part of the magnificent Avenue of the Giants.

Fry: How about the Union Lumber Company?

Nelson: Well, like the Hammond Lumber Company (now the Georgia Pacific) the Union Lumber Company has been in the timber business for over a hundred years on the north coast. The Union Lumber Company was founded by a man by the name of Johnson, whom I never knew. But I know his son, Otis Johnson, who took over the company, and subsequently Russell Johnson, who now manages it. I knew quite a number of the people in there.

In 1945 I remember when, under the leadership of Emanuel Fritz, we held one of the early meetings of the Redwood Logging Conference at Fort Bragg. Good forestry was not on the agenda. You couldn't get good forestry discussed at those meetings for a couple of years. I think Fritz will bear this out. He would allude to it in many ways, and because of Emanuel Fritz's work with the timber industry up there, they went a long ways in improving their practices. But at that time, Union Lumber Company had a policy of trying to sell off all of their cut-over lands. They were selling them off to the livestock people, primarily to sheep ranchers. They sold it at a low price and advocated that the land be burned to convert it to good sheep range. That was a severe treatment because they sold off many thousands of cut-over acres that way.

I remember a number of times talking with Otis Johnson and urging that he hold on to the land, discontinue the liquidation, and try to get another crop of trees growing. Well, before the '40s were over, they did discontinue the selling of their cut-over lands. They began to realize that trees came back on those lands, and today a high percentage of Union Lumber Company's cutting on their own land is second-growth timber.

Logging Boss "Blackie" Freeman and DeWitt Nelson
at Van Duzen Tree Farm Dedication - Hammond Lumber Company (1949)

Nelson: They are still disposing of some lands in and around the populous areas, but the wholesale disposal of logged-over lands has long been discontinued. In fact, they are acquiring other lands for their timber resources. That's been the history of any of the redwood companies. The history today is that the large timber owners are getting larger and the small timber owners are getting smaller or disappearing.

Fry: Then during the '30s, the large timber owners were trying to unload?

Nelson: During the '30s, they couldn't carry the taxes on the cut-over land, so they unloaded everything they could. That's when the Forest Service was able to take advantage of the opportunity and acquire a large acreage of good timber growing land. Also, a lot of such land went tax delinquent. A few smart people acquired some of those lands cheaply. They did very well after the Depression when the demand for timber picked up.

Longbell had their main operation in Weed. I knew Jude White, who was the manager years ago. They followed the same pattern of other pine companies. In spite of what they did, timber came back on their land, and today there's good second-growth there. Longbell Company has now been acquired by the International Paper Company, which is a very fine and progressive organization.

I don't know much about the Fruit Growers Supply Company from personal contact. They are a cooperative organization made up of fruit growers, in large part citrus growers, for their own purpose of producing boxes for the shipment of their fruit. They acquired a lot of land in Lassen County and some in Shasta County and Siskiyou County. They had a large mill at Susanville. They were always considered a pretty progressive organization. They subsequently disposed of their mill at Susanville.

They had a beautiful stand of timber in the Burney Basin which was acquired by, I believe, U.S. Plywood. They still have an operation at Hilt, in Siskiyou County. As far as I know they are doing a pretty good job of resource management. They were one company which Fish and Game last year went out to and took a bunch of pictures of stream damage without any contact with the company. The first the company was aware of it was when they were called into the district attorney's office to appear on charges. The district attorney took one look and told Fish and Game to go back into the woods with the company and work out a solution.

Fry: Have you had any special problems, consistent problems, with any company in particular?

Nelson: I don't think so. I've tried to treat them all the same way; I've never become too intimate with any. I've known them all. We've known each other by our first names, have enjoyed cordial relationships, but I've endeavored to stay away from too intimate relations in order to protect my own integrity. They have never impinged on familiarity in any way. In my book, our relationships have been splendid; we have had our differences and we have gone over them frankly and honestly. We haven't always come to a solution, but we're still working at it.

Fry: Do they come directly to your office?

Nelson: We try to keep their direct contacts with our field personnel in order to protect our lines of command. On special problems, they sometimes come to the state forester.

Fry: What about policy decisions and things like this?

Nelson: Well, policy decisions--they present their case before the State Board of Forestry. It is usually reviewed with the state forester in advance and generally a joint recommendation is made to the Board.

Fry: Is this done through individual companies, or do they work through CFPA?

Nelson: Both. But in large part, it's through CFPA as a spokesman for the industry. That does not preclude individual representation by the companies.

Relations With the California Forest Protective Association

Fry: Because I've been interviewing Mr. Black* and Mr. Schofield,** I'm interested in how the CFPA representation of the companies has either increased or decreased over the years.

Nelson: I was not with the state when Black represented them. I understand from what I hear that as chairman of the Board of Forestry he operated rather high-handedly in some instances.

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*Please see S. Rexford Black, Private and State Forestry in California, Regional Oral History Office, University of California, Berkeley, 1968.

**Please see William R. Schofield, Forestry, Lobbying and Resource Legislation, Regional Oral History Office, University of California, Berkeley, 1968.

Nelson: Schofield went with CFPA about the same time I came in as state forester. We worked closely together with Senator Biggar's forest study committee in the '40s in developing the Forest Practice Act, and Bill played a very dominant and important role in that development. He and William S. Rosecrans were the men who in large part sold the industry into going along with this new experiment; of course, it was the lesser of two evils.

The federal government then was trying to get legislation that would give them regulatory powers over all private forest lands. I've never fooled myself--they took the lesser of two evils because the state legislature is more responsive to local persuasion than is Congress. But we did take advantage of a good opportunity.

Fry: Then after Schofield stepped down, he was succeeded by John Callaghan, who had been under you.

Nelson: John had worked for the Division of Forestry for twenty years. When I came to the state, John was in the Sacramento office as a forest technician. I recognized John's ability and told him one day, "John, you'll never get anyplace in here until you get some administrative experience in the field." So we assigned him to a ranger district, left him there a few years, and finally promoted him to deputy state forester in charge of the northern district office in Redding. When I became director in 1953, Francis Raymond became the state forester, and we brought John in as chief deputy state forester. When Bill Schofield retired, John was offered the CFPA position. He felt that he was at the end of the run where he was, so he went with the industry as secretary-manager of the California Forest Protective Association.

John has approached the job entirely differently than Bill did. He has been more aggressive in some phases than Bill was. Of course, the industry has had some new problems. There've been many timber tax problems since John went there. Bill was formerly with the Board of Equalization; he knew the tax program inside and out. John had to learn it all. But he did his homework, and consequently I think he is one of the best timber tax men in the state today. This is a most difficult area to work in, but I think he has done a good job in representing the industry. John recognizes the problems that face us in the Forest Practice Act and the administration of the rules, because he was right on the firing line himself for many years. He recognizes the weaknesses of the industry and their vulnerable position in many areas; he has conscientiously tried to do something about it, as we all have. Here again, we have run into management policy problems that we haven't been able to solve.

Fry: You mean in getting better cooperation with the Forest Practice Act?

Nelson: In getting and going beyond the minimum requirements. I shouldn't say that as a general statement because many of the major companies are doing a job far in excess of what the Forest Practice Act requires. The critical area is in the stream problem. If I were to make one statement of where the industry's most critical problem lies, it would be that of stream protection on the north coast--that and the lack of understanding what restocking requirements are necessary in order to properly harvest and reestablish a second stand of timber.

Fry: You said that Mr. Callaghan was more aggressive in some areas. What areas are these?

Nelson: I think these are in areas of the Forest Practice problems.

Fry: In trying to bring about a change? What about his work with the legislature?

Nelson: Here John has approached the problem very differently than Schofield. They're both individuals in their own right, and different personalities. I think John has done a good job. He has established his contacts; he has established a confidence and respect among the legislators, and they call on him for a lot of counsel in some of these problems. He has good entree and rapport with them. In making this statement, I do not discount Schofield's work with the legislature in any way, for he too worked very effectively.

Fry: Is there any difference in other services performed for industry? Like, I guess in Schofield's day they did quite a bit of research, things like this, on an industry-wide basis. Has it more or less dwindled down as the state took over more and more?

Nelson: John is, and the industry is, cooperating with us in insect and pest control through our various committees. They also participate in our Western States Fire Research Committee. I think both Bill and John have done a good job in these areas. I think John has been more responsive to public opinion and public pressures than Bill was, because John was exposed to them as a member of the State Division of Forestry. He's more alert to them, and he has still some of the public service point of view.

Fry: I was wondering how his point of view, from the inside of the Division of Forestry looking out, has changed by working with and for the industry.

Nelson: He's representing his own constituents as any loyal employee would do. But at the same time, I think he is trying to get over to his constituents that they have problems that only they can take care of.

Fry: I think we've mentioned everybody on this list. I didn't think you had anything to tell. [Laughter] This is sort of like a Ph.D. examination.

Nelson: How about giving me a Ph.D. on this. [Laughter]

Members of the Board of Forestry

Fry: We'll do it from the "Order of ROHO."

I'm going to ask you to evaluate some of the more long-standing Board of Forestry members for us. I think in our last tape you had made some comments about Rosecrans. Yes, we have had a number of references to Mr. Rosecrans, but not your evaluation of him.

Nelson: Good. William S. Rosecrans. The gods often put the right man in the right place at the right time. He was one such. Bill was a grandson of General William Starke Rosecrans of the Civil War. He grew up on a dry farm in Los Angeles County. It was one of those farms that suddenly grew oil wells and became the Rosecrans Field. He had a classical education from Loyola University of Los Angeles.

In 1916, Southern California was stricken with severe floods. That experience stimulated a life-long interest in watershed protection and water development. As such, he was active with the Los Angeles Chamber of Commerce, where I first met him in 1935. He had unusually wide interests. During World War II he was chairman of a western hemisphere committee. I have forgotten the details, but he learned to speak Spanish. In executing his responsibilities, he traveled throughout South America and made all of his speeches in Spanish. This indicates the manner in which he tackled every activity in which he became engaged.

Bill served on many national committees of various conservation and business organizations. He was president of the American Forestry Association from 1941 through 1948. Governor Warren appointed him chairman of the Board of Forestry in 1943. The Board and the Division operated under his leadership until 1958. One could not have had a finer group of men to work with than I had with that Board.

I recall Bill and I were driving late one night. I asked him what had stimulated his interest in forestry and conservation. His reply was simple but unusual. First, it was the flood of 1916. When the Rosecrans ranch became the Rosecrans Oil Field, he was suddenly confronted with a choice; he could have devoted his time to handling

Nelson: his money, and probably would have become very rich, or he could become a playboy, or he could take a middle course and work for something worthwhile. He chose the latter and devoted much of his time, energy, and money to forestry and conservation programs. He also devoted much time and made major financial contributions to his alma mater, Loyola University, and Claremont Men's College at Pomona, through the Rosecrans Foundation. Following his death in 1965, Mrs. Rosecrans has continued to carry out his wishes in regard to the two universities.

It has been a real privilege to have worked with Mr. Rosecrans for a number of years.

Fry: The others whom I have seen appear most often in our research are Ken Walker and Wendell Robie, Domingo Hardison, Jeff Prendergast, and Frank Reynolds.

Nelson: Yes, okay. I can give you a little rundown on them.

Ken Walker, of course, is a lumberman coming from an old-time lumber family. The family which established the Red River Lumber Company. Ken is a hard-fisted person who looks at the dollar very closely, whether it's his own or the public dollar, and he is slow to make a change. Ken can see more obstacles and reasons why something shouldn't be done than most anyone I've ever worked with on the Board of Forestry. Ken is certainly not a yes man. When he was just a member of the Board of Forestry, his noes were more evident than his yeses. He subsequently, for a period, became chairman of the Board of Forestry. In the responsibility of chairman, Ken successfully submerged many of his own points of view and did not express his negative attitude nearly as much as he had before. I find that this is characteristic of many men when they get into a position of responsibility. Ken was a good man to work with, but not always an easy man to work with. I have a high regard for him.

Wendell Robie was a little bit like Walker, and yet very different, very different from Walker. Robie is a dynamic "idea guy." He gets on a tangent and he drives it for all it's worth. I worked with Robie when I was on the Tahoe Forest, in promoting ski development on the Donner Summit. When Robie was a member of the Board of Forestry under the Olson regime, I was working with him. He was the man who initiated the first forest fire plan, later to be known as the Clar plan. He barnstormed all over the state of California with Ray Clar and others of the Division in selling that concept to the people and getting it over to the legislature.

Robie is a man of enthusiasm and drive. When he later became chairman of the Board of Forestry, he reacted very much like Ken Walker did; he settled down, assumed his responsibilities of chairmanship, and let others do the talking more than when he was just a member. [Laughter]

Fry: This argues for your idea of putting the burden of responsibility on people, for they usually measure up to it.

Nelson: [Laughter] Yes indeed. These are responsible people; they recognize it. They live up to their responsibilities. Incidentally, Wendell Robie served on the Board of Forestry under Governor Olson, Governor Warren, and Governor Knight. Ken Walker served under both Governor Warren and Knight.

Frank Reynolds represented the redwood industry on the Board of Forestry.

Fry: Oh, we might mention who these others represented.

Nelson: Yes. Ken Walker represented the pine producing industry, and Wendell Robie represented forest land ownership at large, both pine and redwood. Frank Reynolds represented the redwood producing industry. Frank had a background of rancher in Mendocino County at Point Arena, and later became tax assessor for Mendocino County. During the Depression years, and before becoming county assessor, Frank picked up, in Del Norte County particularly, quite a bit of land from the delinquent tax rolls. He applied very fine management principles to his lands. Frank served on the Board under Governor Olson, Governor Warren, and Governor Knight. He was a most sincere and conscientious Board member. He had a great deal of idealism as to how we should operate. Some of it was impractical at the time, but--

Fry: You mean idealism referring to good forestry, even though it might have been difficult to put through?

Nelson: Good forestry, yes. During Frank's later years on the Board, and after he retired from the Board, he did a lot of things on his own timber lands that really cost him money. They weren't economically good, but he was doing a lot of his own experimental work, trying to see what could be done. It became sort of a plaything with him, and a very productive plaything. He did a lot of pruning and thinning in his second growth, as well as spraying of alders on the river bottom and creek bottoms in order to open up the hardwood stand of alder so he could get redwood and Douglas fir growing there. Frank was a very fine Board member. He was a man who you could discuss things with; if you could make your point, he would go with you.

Domingo Hardison represented agriculture and was an outstanding Board member. Domingo served under Governors Warren and Knight and a little while under Governor Brown. He was a very solid Board member and a solid citizen. He had a very intelligent, analytical mind. He could put things together and explain them in such a way that anybody could understand. As such, he was a strong member. He

Nelson: was from Santa Paula in Ventura County, a citrus grower representing agriculture. He really had a diversified ranch down there, a corporation, which he managed. A wonderful man in every way. A quiet individual, but very persuasive when persuasion was needed, and a man for whom I have a tremendous respect and regard.

Jeff Prendergast represented the beneficial use of water. Jeff came from the Redlands area. He was general manager of the Bear Valley Mutual Water Company most of his life. He understood water. He had been an assemblyman in the state legislature for a few terms, I think back in the '30s. He too was one of the solid citizens. He understood the legislative processes. He was progressive in his thinking and loyal to the organization and loyal to his beliefs.

Fry: What do you mean, progressive? When you are a water man, how are you progressive?

Nelson: In the development and conservation and proper use of water. You know, we're wasting a lot of water in California by just the way we use it. Jeff was always trying to get better use practices of water. He was progressive from a forestry point of view. His primary interest from the forestry point of view was in fire protection of the watersheds of Southern California. Consequently, he was very helpful in helping us improve our fire protection organization. As an ex-assemblyman, he had some entree across the street which others didn't enjoy. We've been fortunate on the Board of Forestry throughout the years, particularly after Governor Warren, in having good Board members--very sincere, very conscientious men working for the improvement of the whole program, whether it be forest practices, range improvement, fire protection, or what have you.

Fry: I suppose one of your major jobs in connection with the Board was in keeping them informed. How did you do it?

Nelson: That has become more difficult as time has progressed. In the early days, we all got into the field more. We were able to take more field trips. With the Warren Board, which was my first experience, we traveled as a body with Senator Biggar's Interim Committee for those two years of the forest study committee. As a result, everybody became familiar with all the problems, as well as the geography and the people. As time progressed and pressures got heavier and demands became heavier, we lost this direct field contact; it became increasingly difficult for everybody to have the familiarity with the problems that we had once had. So, like many other organizations, many decisions were being made on the basis of past concepts, memory, and on facts as they knew them back then.

Nelson: Francis Raymond has been doing a good job in getting the Board in recent years back into the field on field trips. It is being helpful. But time is such a problem today with everyone, not only with Board members but with a state forester and his own crews. There just aren't enough days in a year anymore, it seems. This is a problem. Here are men who are concerned and interested in the total problem, and yet their close familiarity is only within those fields in which they have immediate contact. I guess you can't always blame the general public for not understanding; even those people who are close to it are usually intimate with only one segment of it and not the total problem.

Fry: Can you give an example in which action was taken which might have been based on misapprehension of the way things have changed?

Nelson: I'm not so sure that I can adequately answer that question. The demands for more recreational opportunities probably come closer to that question than anything else. We are taking action on our state forests to improve the recreational development and opportunities there. We've got to do more, but I don't know as I can answer your question adequately.

Fry: I was wondering, when you were moved up from state forester, did you come into contact with the Board and what was your relationship, then, to the Board? It was still a part of your responsibility.

Nelson: Oh yes, I continued and still continue to maintain contact. It's not as close or as intimate as it used to be. When I became director, I probably maintained a closer contact with Forestry than I did some of the other divisions for a while. However, I withheld many urges to move into the area because if I did, it would be unfair to State Forester Raymond. It would subordinate him. I just forced myself as much as I could to stay out of the details. Then, as time progressed and pressure got heavier, from particularly Beaches and Parks, I lost the intimate contact. But I didn't lose it entirely; after all, I was a forester. Here was my first love, the problems I was familiar with, the people I was familiar with, and I've always had to guard against subordinating the state forester because of my previous relationships.

Fry: And you had a basic interest there, too.

Nelson: Yes. And, of course, when we really got into the park and recreation area, that took about 75 percent of my time for a number of years. So I got out of the state forester's hair, in many ways. [Laughter]

THE VARIED DUTIES OF STATE FORESTER

Changing Priorities

Fry: I have a list here of your duties when you were a state forester. I was wondering which of these you spent most of your time on as the forester: fire prevention and law enforcement, forest fire control, state forests, Forest Practice Act administration, Forest Advisory Service, nursery and reforestation program, forest pest control, brush range improvement, soil and vegetation survey, emergency revegetation and research. Did I leave out something?

Nelson: You covered most of the waterfront, I think. Well, where I spent most of my time varied, depending upon the issues and the problems of the time. Of course, when we were initiating the Forest Practice Act and establishing the rules, that took a tremendous amount of time because we had to get the committees appointed; we had to get the rules developed and established and accepted by the Board of Forestry. Then we had to put all of this to a vote of the timber ownership. We had to get a majority approval on that by a ballot vote of the timber ownership, and that took a lot of time.

I had employed a forest technician by the name of Preston H. McCanlies. He came back from the war as a captain in the marines. He had been a private practicing forester with some of the companies. "Mac" was a good Scotsman, and he was a great help throughout this period. Nevertheless, it took day-in and day-out work on my own part. The same thing was true of the ranger improvement program. These were all taking place at the same time, following the 1945 legislation. So to get this show on the road took a lot of time working with and meeting with livestock people.

I enlisted or recruited Leland Smith to initiate this program. I had worked with him on the Tahoe National Forest before he retired. He was a good range man; he understood the problem. He knew the people; they had confidence and respect for him. He was a tremendous help. Nevertheless, I had to energize the thing and handle the policy problems. At the same time, we had the problem

Nelson: of acquiring state forests. Here I recruited Belnap Goldsmith whom I'd worked with on the Shasta and the Tahoe. He was an excellent man in the timber field, timber exchange and acquisition, in the Forest Service. He retired, so I was able to recruit him to head that job. "Goldy" did a good job in working out the acquisition of the Latour State Forest from the State Division of Lands, and particularly working, he and myself, with the Caspar Lumber Company in the acquisition of the Jackson State Forest. It was good that I was young at that time.

Then, of course, fire control. We were trying to build a strong fire control organization. If there was a major fire going anywhere in the state, I was on it.

Fry: You mean you actually went to the scene of the fire?

Nelson: Yes, I did. At that time, we had a smaller organization. We had less paperwork and less procedural things in the office. I had Ray Clar, who did a good job of running things in the office, and I spent a high percentage of my time in the field. I knew practically every man in the organization. I contacted our fire control stations, and I hit practically every big fire. I think that is what developed the esprit [de corps] that we had.

I know we have lost some of it; State Forester Raymond laments it too. But paper work seems to bog people down. That is the unfortunate part of bigness--you lose your intimate contacts, your intimate controls, not only within your own organization, but with the people whom you're serving and working with. We have tried to figure out how we could get back to this ideal situation, but we just haven't come up with a solution. There aren't enough bodies to keep everything moving that must be moving. But everyplace--well, it's coming back to me now at my point of retirement. I have received many letters from fellows that were just on the fire crews at that time, that want to wish me the best. We were in contact and we built an esprit [de corps] that was wonderful. It was a swell outfit; it still is a good outfit, but we don't have the contact that we had at that time. I could not have asked for a finer or more loyal group of men and women than we had in the Division.

I mentioned McCanlies in reference to forest practices, Goldsmith in regard to state forest acquisition, and Smith in range improvement. These were really only interim appointments. McCanlies resigned in 1948 to accept private employment in Oregon; Goldsmith and Smith completed their tours about the same time. In 1948, we appointed T. F. (Tobe) Arvola as deputy state forester in charge of resource management. I think Tobe got as much results from the Forest Practice Act as anyone possibly could.

Fry: In these other things you mentioned, such as special things like Forest Practices Act, range improvement program, and the forest acquisitions, I still don't have a clear idea of what you were doing up there in Sacramento. Were you working primarily with your superior and with the legislature, as you say you were, in policy matters?

Nelson: Yes. General Hannum was the director of the Department of Natural Resources at that time. The General, a West Pointer, had been with the U.S. Army Corps of Engineers all of his life. He was a wonderful person, and he had the ability to delegate. He delegated everything to me that dealt with forestry. So I had it lock, stock and barrel, you might say. Of course, I had to handle many things; I didn't cut the General out of these. We had a very intimate relationship; he knew what I was doing at all times. I kept him informed. I had to work with the control agencies. I had to work particularly with the Department of Finance. At that time our budgets were relatively small; I knew every dollar that went into them. In my own mind I could support every dollar that went into the Division's budget. I can't do that today. Too many dollars and too many other things are pressing on me. Even the state forester has to rely on the staff for more and more. I didn't have much staff.

Fry: What did you have for your staff?

Nelson: Oh, I had--we had a seasonal fire dispatcher at that time. We had Walt Winters in charge of fire control. He was an old-time ranger who was gold plated; he was just as reliable and conscientious as they come. We had one or two forest technicians who did what technical work was required; and we had a fiscal officer. I had Ray Clar as the chief deputy. I would have been hard pressed if it were not for Ray, because he knew everyone in the organization and he knew their strengths and weaknesses. Unfortunately, Ray finally broke under the strain, as he just couldn't take the pressure. We were able to work out another position for him, but he was a godsend to me in those early days. I don't know what I would have done without him.

Fry: So you were able to use him for about ten years? I'm not sure at what point he broke down.

Nelson: I think up until about '52, as I recall. Then I brought Francis Raymond in as chief deputy state forester shortly before I became director. But Ray did a lot of trouble-shooting for me, particularly in the mid forties, in cleaning up some of the problems that had developed with fire equipment that had been purchased under emergency conditions and assigned out to counties under the war conditions. We had some very difficult problems there. Ray was my wheel horse in that job. He played an important role.

County Supervisors vs. Division of Forestry

Fry: I think Ray was telling me that he thought that he was receiving a lot of personal animosity on the part of a lot of the supervisors in the counties.

Nelson: He did. Particularly in Kern County. That was a carry-over from the old regime of every ranger doing what he pleased and working more for the county than for the state, even though he was on the state payroll. Harold Bowhay was the ranger at that time in Kern County, and the situation became highly sensitive and highly critical. It was several years before we finally got that worked out.

They finally pulled out of the Division of Forestry and became an independent county. We contracted with them to do the state job as we were doing in Los Angeles, Ventura, Santa Barbara, and Marin Counties. That stemmed in large part from some of the doings of the short-term director, Bill Moore, who served as director for a year before General Hannum.

Fry: I'll be darned. So they just seceded from the whole thing?

Nelson: Yes, they just seceded. They had different problems. They had oil field problems. They were handling the protection of a lot of little communities, and it wasn't a straight forestry outfit. Ranger Bowhay had built a small empire there; Harold Bowhay was later placed in charge of the fire program in the state Civil Defense office. We work very closely with Harold in that office. We had our days when we weren't working very closely together, but you can't permit such things to last forever.

Fry: Did Bowhay continue as head of the fire control?

Nelson: Yes, with the Civil Defense office, until his death.

Fry: We are getting away from your staff people. We'll come back to the county problems in a minute.

Nelson: Okay. With the new programs authorized by the 1945 legislature, we had to have some additional staff. About that time some of the young foresters who had been employed before the war were coming home from the war. We brought Melvin Pomponio from District II, Redding, to take over office management and fiscal control. In 1946 we were just starting the honor camp program in cooperation with the Department of Correction and the Youth Authority. We placed L. T. Petersen in charge of that growing program. When Charles Ennis died in 1946, Pete was made deputy state forester in charge of engineering and the

Nelson: camps. When Leland Smith left in 1949, we brought L. T. Burcham in from the Mountain Home State Forest to take charge of the range improvement program.

Fry: All right. Now, how about the other counties you had mentioned--the independent counties?

Independent Counties

Nelson: Historically, Los Angeles, Ventura, Santa Barbara, San Mateo, and Marin Counties had pretty strong fire protection organizations of their own before the state really got into the business in the late '20s. Prior to the 1945 legislative program they were getting some Clarke-McNary funds from the federal government via Division of Forestry allocations. When we got the state's responsibility area defined by law in 1945, under the leadership of Senator Hatfield, we then entered into a contract with them whereby we paid for that part of the protection located in the state responsibility areas of those counties. We didn't pay in full; we only paid for certain phases of the job. That is, we paid for their lookouts, for their fire crews and some of their assistant rangers, and some of their operational costs, all on a formula basis. We don't give them as much as if we were protecting it ourselves.

About three or four years ago San Mateo County, which had historically been an independent county, decided that they wanted to become a part of the Division; so they gave up as an independent county. Now, we have Los Angeles, Ventura, Santa Barbara, Kern, and Marin Counties as so-called independent counties. It works out quite well.

Fry: You feel that really this is not a particular disadvantage, then, to the entire fire plan because you get it cheaper?

Nelson: We get it cheaper. In Los Angeles County the problem is so different because of the metropolitan area, and the way they work with about two dozen fire districts. All of these counties have a lot of population and structural problems. They are more metropolitan than rural in many areas.

I think in some areas we could do a better job as far as watershed protection is concerned, but we've had excellent cooperation. I think our weakest independent county is Santa Barbara County. They just haven't given as much of their own money to their organization, as we think they should. But it's getting better each year. They've had their fingers burned a few times.

Fry: What was their reaction to this past fire? It was one where their fingers got burned. Are the people more alert to the overall problem now?

Nelson: They're much more alert to it. There again, you have a problem of ownership and jurisdiction of control. That fire started on county protected property and traveled very quickly into the national forest. Then the wind shifted, brought it around into the Montecito [county protected] area, and there we had the heavy losses in property, in large part because of inaccessibility and inadequate water supply. We could get fire trucks to the end of the road, but we couldn't turn them around in many places. In order to get from a house on one side to a house on the other side of a little ravine, the crews had to go way down to the bottom of the hill and come back up to it. There wasn't adequate tying together of roads. People moving stuff out of their property blocked the roads, and they hadn't cleaned up around their property. Much of the loss in the Montecito area was due to congestion and to lack of clean-up around the improvements, and very critical fire weather--heavy east winds with practically no humidity, and high temperatures. But we wouldn't have lost as much had there been more clean-up and better accessibility. But, by and large, the independent counties work out pretty well. It does give another contract type of job that has its own peculiar problems.

Fry: Would you like to give a more critical evaluation of General Hannum?

Director Hannum

Nelson: Director Hannum came to the post of director in February of 1944. I came as his deputy in April and took over the state forester's job. I had known General Hannum casually when I was on the Tahoe National Forest in the thirties. At that time, the Corps of Engineers was building debris catchment basins on the American and Yuba Rivers to hold back hydraulic mining tailings. I knew the General casually because of public meetings in which we both appeared during that period.

When we came together as a team, he was a man for whom I had a very high regard. He was an excellent administrator in that when he delegated a problem to somebody, he expected it to be done; only rarely would he check on the method or progress. He just expected it to be done and done properly. He expected full loyalty, of course. He kept informed, but he did not bother with details, except when there became an issue; then he was right in there with me, pitching for all it was worth. I handled all of our own

Nelson: legislation, including our budget presentations.

Fry: Oh, you did? He didn't really go over to the legislature?

Nelson: Very, very rarely. I never could understand how he got along as he did. It was, of course, that he delegated most everything--and it worked. His secretary and stenographer were rarely busy. It was often a point of embarrassment to me because they didn't have enough to do, and they'd fill their time by reading a magazine. I'd work them whenever I could; but the day that he retired and they came to me (or I went to them as director), from that day on they just seemed to be submerged. I don't know why. I was more participative in all kinds of activities and with many more groups. I think in part it was that the General didn't know the people throughout the state as I did. That is, many, many more. They came to me instead of the General. And so I got the workload.

Fry: Which never even went through him in the first place.

Nelson: Much of it didn't. Only as my keeping him informed. Of course, things were on a relatively slow whistle at that time. Things weren't nearly as pressing as they are now. The war was over; the revenue was still coming in. The state was laying away money for the rainy day, so-called. Budgets were not as critical a problem then as they are now because there was money enough to meet most of the demands, and the population wasn't so great. We didn't hit ten million people in population until about 1949. At that time, the Department was made up of the Divisions of Fish and Game, Beaches and Parks, Oil and Gas, and Mines and Geology. The Division of Fish and Game was made a department in 1951. But here again, with his ability to delegate he looked to his chiefs to do the job.

Fry: I think the question in my mind, then, was that some of these agencies are in competitive positions with each other; in this case, an administrator like the General would more or less leave the burden on the heads of his divisions to work it out or slug it out with each other. Is this what happened?

Nelson: Right. That's about the way it worked. I was not concerned with Mines and Geology. Oil and Gas, I knew the people. During his regime as director, I only remember three or four staff meetings where he brought all the chiefs together. So we didn't have much business back and forth within the departmental make-up. I had some relationships with Fish and Game.

But there was a quarrel between the Fish and Game Commission and the director. General Hannum tried to exercise some leadership over the Fish and Game Commission and the Division, but the Commission refused to honor or accept it. They went to the attorney general and

Nelson: got a ruling that they were their own boss and the director had no authority over them. So that kind of left the General out on a limb as far as Fish and Game was concerned. He did have friendly relationships, but he didn't have any authority, which was an unfortunate situation.

In 1949 the legislature created the Water Pollution Control Boards. The General was in on that fight all the way. He gave real leadership to that, and he became the chairman of the State Water Pollution Control Board, which he carried while he was the director. He did a good job there. It was a new program, and he had to build an organization for it. That took a great deal of his time for a couple of years or so.

Fry: This was just before you stepped into his shoes?

Nelson: No, the Dickey bill creating the state and regional water pollution control boards was passed in 1949.

Relations With the Legislature

I remember one instance. I happened to be in the gallery of the assembly one day when the Water Pollution Control Bill was being debated and voted on. The General was trying to get more teeth into the law, and Assemblyman Dickey was trying to keep the teeth out of it. Assemblyman Randal Dickey read what to me was a tirade against General Hannum. He read it on the floor of the assembly, damning the General for what he was trying to accomplish through the State Water Pollution Control Act. There was some pretty rough going for a while in the development of that act, particularly between its author, Assemblyman Dickey, and the General.

Fry: What was the main issue?

Nelson: The issue was how much control could be placed against the industries from dumping their waste into streams, and what those controls were to be.

Fry: Did Hannum have any? Did he care whether this was made up of the regional boards?

Nelson: I don't recall, because I had my own problems and I wasn't following it too closely. I don't recall whether he was opposing the regional concept or in support of it. Anyway, the regional concept evolved, and it has been working pretty well.

Fry: It seems to me that would take a lot of control away from the state office.

Nelson: It does. For many years we had a problem because the regional boards felt themselves completely autonomous, and the secretary-managers and staff personnel to the regional boards felt themselves pretty remote and independent from the state office. But gradually we've overcome most of this, until now we have a pretty cordial relationship with the regional boards and their executive officers.

Fry: Then, if you handled most of the legislative work, I suppose this took a great deal of your time when the legislature was in session.

Nelson: Oh yes.

Fry: There are four committees, I think, that were the ones you probably appeared most often before or worked with.

Nelson: The major committees were those dealing with the resources in both the senate and assembly. Those were the primary committees.

Fry: Yes. The Senate Governmental Efficiency, the Senate Finance--

Nelson: No, not Governmental Efficiency.

Fry: You didn't have to work with them?

Nelson: Some, but not a great deal. It was mostly the Committee on Public Works and Conservation, on the assembly side, and the Senate Natural Resources Committee, and of course the budget committee on both sides.

Fry: That would be Senate Finance and Assembly Ways and Means.

Nelson: Yes.

Fry: Would you like to choose legislators that you could comment about?

Nelson: I think I did, in a previous tape, where I told about Senator Hatfield in the development of the nursery program, of Senator Swing and that little ruckus between the legislative analyst, Rolland Vandegrift, and myself. I've been fortunate, I think, in my legislative relationships, in working with them in most of our problems.

Fry: Did you work primarily with both houses?

Nelson: Yes, I had to work with members of both houses, particularly the committee chairman and the committee members. We worked together very well. There were a lot of them who were particularly helpful. If I would start naming names, I would probably leave out some, and that would be an injustice.

Legislators

Fry: I was wondering about Senator Edwin Regan.

Nelson: Oh, Senator Regan was very helpful, yes. Of course, I knew Ed shortly after he moved from San Francisco to Weaverville as a young attorney.

Fry: Did Regan have important, pertinent committee assignments?

Nelson: Ed was not a member of the legislature at that time. Ed Regan became a senator in 1948 and served four terms, when he was appointed associate justice of the third appellate district. When he became senator he was very interested in getting an "in-lieu" tax bill through Congress to require the federal government to pay "in-lieu" taxes to the counties. He became chairman of a Senate Interim Committee on Public Lands. In this, he developed a very comprehensive report. We worked very closely on many problems, and Ed was on our Senate Natural Resources Committee. Because we did know each other, we were able to work very closely together.

In 1951 Senator Regan authored the first significant revision of the Forest Practice Act. It required timber owners to notify the state forester of logging operations and operators to have annual permits instead of just being registered. It made operating without a permit a misdemeanor, and permits were subject to suspension or revocation in case of noncompliance after an administrative hearing. It also provided for amendment of the rules without requiring a vote of the timber owners.

Fry: Did you say that he was on a natural resources committee, or did you mean the senate committee?

Nelson: Yes, on the Senate Natural Resources Committee of which he was chairman.

Fry: Was his special report in regard to in-lieu taxes?

Nelson: In-lieu taxes, land ownership, methods of management by the various federal agencies, and things of that nature. There was no progress made on the in-lieu tax issue. Following the war timber cutting on the national forests continued to increase, and since 25 percent of all receipts go to the counties in which the national forests are located, many counties fared very well. The pressure for in-lieu taxes on federal lands has diminished. You rarely hear it spoken of anymore.

Fry: What would this mean to state lands? You were in the business of acquiring state lands at this time--did you have a position on it at the time?

Nelson: I did. I insisted that we pay an in-lieu tax on our state forests, and that requirement was written in the law.

Fry: There was a Senator Swift Berry; was he there when you were there?

Nelson: Yes, I can give you a few comments on Swift. Swift Berry came in later. Swift, of course, was a member of the Senate Natural Resources Committee. He was a graduate forester of the first forest school in America, on the Biltmore Estate in North Carolina. Swift had been general manager of the Michigan-California Lumber Company from 1930 to 1949, which was doing an excellent job in timber management. He became very helpful in our forest programs.

Fry: He had been in the thirties quite influential on the state with the state board, too. Was this when you were state forester?

Nelson: Swift was a member of the board during the late 1920s and early 1930s. But he was active as a representative of the timber industry in many legislative programs and policy problems, and worked with the board throughout his career with the industry. He was elected to the state senate in 1952 and made chairman of the Senate Natural Resources Committee in 1956.

Fry: Was he generally on the side of the board on issues?

Nelson: Generally, yes. Swift was progressive. He believed in good forestry and good fire protection. So I would say that generally he supported the board. Senator Swift Berry (as a professional forester as well as a practicing forester and general manager of the Michigan-California Lumber Company) understood the problems of dealing with forestry and many of the other resources. Consequently, he was helpful in getting legislation supporting adequate fire protection, particularly.

Senator Harold T."Bizz" Johnson, now a Congressman, was for several years chairman of the Senate Natural Resources Committee. He too was helpful. One of the major things that he accomplished was an interim study of the conservation camp program in which we used inmates of prisons and wards of the Department of Youth Authority in camps scattered over the state. These men, as described earlier, work on all types of resource problems and projects as well as constituting the backlong of our manpower in fire fighting.

Squaw Valley was in Bizz Johnson's senatorial district. After Alex Cushing had successfully sold Squaw Valley as the site for the 1960 Winter Olympic Games, Bizz became the legislature's major supporter of the games. It started out as a million dollar project

Nelson: but cost more than $17 million before it was over. Bizz carried much of the battle to get additional funds as the costs of developments for the games continued to mount. I'll have some comments to make about the Olympic Games at a later time.

On October 28, 1959, Placer County dedicated its new county fairgrounds exhibit hall to Bizz. I had the honor of making the dedication speech.

Senator Stan Arnold of Susanville, now superior court judge in that area, understood the wildland problems, and he too was helpful, helpful in forest practice legislation and in legislation dealing with the conservation camp program.

Assemblyman Frank Belotti of Eureka thoroughly understood the problems confronting the redwood industry, which at this moment is a most controversial issue between whether we harvest the redwoods or put them all in parks for total preservation purposes. Assemblyman Belotti, in 1963, authored legislation which greatly improved the enforcement capabilities of the Division of Forestry under the Forest Practice Act. This was a milestone and gave the state forester and the director of conservation better tools for enforcement. These tools have been used successfully and much progress has been made in improving the practices. But there is still need for much greater progress because people accept change slowly; particularly where it costs them money, it is difficult to accomplish.

Fry: It's interesting that an assemblyman from the redwood district would tighten up the Forest Practice Act. Did he have the backing of the redwood industry in his area for this?

Nelson: He had partial backing. But Frank is a man who takes his responsibilities seriously, and he worked very helpfully with us.

Senator Carl Christensen, also from Eureka, representing that area on the senate side, was likewise helpful in ironing out differences of opinion and working out methods of applying new enforcement regulations. However, when it came to the vote, he remained silent, neither voting for or against. He had told me in advance that that would be his position.

Fry: He really was a good arbitrator--mediator, then.

Nelson: Well, on the record he didn't commit himself, but he was helpful.

Fry: Really neutral.

Nelson: Let's see. Senator Steve Teale has been helpful down through the years. While he has rarely carried any legislation, when the chips were down and we needed some muscle, Steve came in and usually gave it to us. This was true for some park legislation, particularly dealing with the purchase of the South Calaveras Grove from Pickering Lumber Company. It was also true in getting an appropriation of $800,000 in 1963 for the construction of a training academy in the vicinity of Ione for the Forestry Division. Steve is a strong man in the senate. He is vice-chairman of the Senate Finance Committee, and he has been extremely helpful not only in parks and recreation but in the Division of Mines and Geology.

Back in 1959, Senator [Randolph] Collier became interested in some of our mining and geology problems and recognized the need for establishing an adequate laboratory in the Division. We were unable to get an item in the budget to authorize this. One day, while our budget was being heard by the Senate Finance Committee, Senator Collier put in an augmentation to the budget of nearly a million dollars for establishing and equiping our mines and geology laboratory. It was approved without a single question being asked. This was a real boon to our program.

Fry: This passed, then.

Nelson: Yes--no questions asked.

Fry: I have some other assemblymen down here. Also a few more senators. But there are some that are starred as perhaps having made more contributions to forestry than others. One of these is Jacob Leonard.

Nelson: Jake Leonard was on the Forest Study Committee, chaired by Senator Biggar, back in 1943-44-45-46. He, along with Senator Biggar, Senator Oliver Carter, and Assemblyman Paul Denny--all contributed tremendously to the legislation that was enacted in '45, '46, and '47. That has been the basic legislation that we've worked on through all the intervening years.

Fry: Senator Fred Farr?

Nelson: Senator Fred Farr of Monterey County has been a strong leader in the conservation field. In many respects, Senator Farr has been out in front of all the other legislators but has been unable to sell many of his rather ideal concepts, such as zoning along state highways to protect the scenic values, and the purchase of scenic easements in private lands. However, under his guidance and the leadership of his interim committee, which was the senate fact-finding committee on natural resources, in 1963 we did get the first real basic legislation that gave the Division of Forestry

Nelson: adequate tools for enforcing fire prevention programs, such as clearing away fire hazards around all structures, power lines, and industrial sites in fire hazardous areas, including the legal tools for enforcement action. This we can credit to Fred Farr and his committee.

However, it was only in 1966 that we secured any budget to implement this legislation. We asked for a minimum needed to get it started of $2.6 million. On recommendations of the legislative analyst and the Department of Finance, that was cut down to $500,000, which is a bare drop in the bucket. We figured that this, to be totally effective, will cost us about $6 million a year. We're dealing with thousands of people, thousands of structures, and millions of recreational visitors--over forty million acres of highly flammable terrain. You don't get the message to them for peanuts.

Fry: This forty million acres--does this only pertain to forest lands?

Nelson: It pertains only to the State Division of Forestry's protection responsibility area. Outside of that are the eighteen million acres of the national forest and the four or five million acres of the national parks.

Fry: Had this type of legislation been attempted before?

Nelson: We had attempted to get improvement in the prevention field, particularly budget-wise; and while the legislative analyst had supported our need for it, he never was willing or able to support our financial request for it.

Fry: What about Assemblyman Lloyd Lowrey?

Nelson: Yes, by all means, Lloyd Lowrey should be recognized. He was in the assembly for many years. He was there, as I recall, when I came on duty in 1944, or at least shortly after.

In 1949, legislation was passed establishing the forty-hour week for state employees. Well, the forty-hour week just doesn't fit our fire fighting organization. We have to be on duty around the clock. It was through Lloyd Lowrey that we got an exception to this legislation as it affected our fire fighting forces. We were able to work out with the personnel board a program of paying our fire personnel a 5 and 10 percent bonus payment for the 120 duty hours per week that we were requiring at that time. This, in the last several years, has been reduced to ninety-six-hour duty weeks, and the trend is toward even reducing that down to eighty-four or seventy-two hours; some are even demanding a fifty-six-hour duty week. I can't understand how we can afford to handle our protection

Nelson: with what in effect is a platoon system like they use in the cities. The cost will just be tremendous.

Fry: This would mean that you would be maintaining a larger overall staff?

Nelson: We would have to more than double our forces and only have them available part-time.

Fry: These demands are coming from the men themselves, or--?

Nelson: These are coming from the men in the field because they are comparing themselves with city fire departments. The men do have difficult problems in regard to living conditions; they're away from home, they're living in our fire suppression stations during their duty periods, and it certainly upsets their family life. How this will ultimately be determined, I can't tell at this time. But the trend is for shorter hours, which means more men, more cost.

Lloyd Lowrey has been helpful in many of our programs, particularly in range improvement work where fire is used as a tool in clearing brush for converting brushlands to grasslands. This has been his primary urge, being a cattleman and sheepman himself. In 1957, Lloyd Lowrey authored legislation which directed the California Public Outdoor Recreation Study and provided a $300,000 budget for that study. This was conducted in our Department of Natural Resources. We put together a small taskforce to do the job. Elmer Aldrich was placed in charge of the project, and we got assistance from all the departments in the state that were interested in any phase of recreation, as well as federal agencies and local levels of government.

This report was made in two volumes, with the final report coming off the press in early 1960. For some reason or other, Mr. Lowrey didn't like the report; I never could find out why. I think probably some of the reason was it didn't do some of the things that he thought it should do, and he became very unhappy with its publication. So he immediately called for a series of public hearings by his interim committee that dealt with recreation and natural resources. The committee held three consecutive days of public hearings; the first in San Jose, the second in Los Angeles, and the third in San Diego, in which he tried to disqualify the report. Unfortunately for him, but very fortunately for me, since I was the chairman of the study, all three of those days were a parade of witnesses supporting every item in our report.

When they wound up in San Diego, the committee itself got into the most embarrassing squabble and argument that I have ever seen in a public legislative hearing. Assemblyman Lowrey and Assemblyman [Vernon] Kilpatrick were actually screaming at each other.

Nelson: Finally, one of the witnesses in the audience called them together and told them what he thought of their conduct. They settled down, and I never heard another word from Lloyd Lowrey in regard to the recreation report.

The facts are that this was the first outdoor recreation report, as such, ever prepared. It became the prototype for the Outdoor Recreation Resources Review Commission, which was established by Congress and appointed by the President. This commission was chaired by Laurence Rockefeller. Practically all of the statistics that we had developed were confirmed by the findings of the federal commission. I had the pleasure of serving on the advisory council to the commission.

It also became the prototype for many other state studies. Following the commission's recommendations, which were set forth in the Outdoor Recreation Resources Review Study Report of twenty-seven volumes, Congress passed the Land and Water Conservation Act, which provides funds to state and local governments for developing recreation facilities and acquiring recreation lands. But before such funds can be made available, there must be an adequate statewide or regional plan acceptable to the federal government. Because we had our report in hand, it meant many millions of dollars to the state of California. They have accepted it. Of course, it had to be brought up to date. We endeavored to get through the legislature, following this report, a small staff to keep it up to date, but were unsuccessful.

It's interesting that so many studies of this nature receive more recognition and immediate use outside the state which creates it than in the state. The Department of Fish and Game is now finding this very fact to be true in a fish and game study and report which they put out this past year. It's a rather peculiar reaction, but it seems to be true in many instances.

Fry: Can you name any other states that you know that might have used this one?

Nelson: Well, Illinois, Oregon, Washington, to mention a few that come to mind offhand. I was invited to Hawaii by the Hawaiian Chamber of Commerce to review with them the methods we used in making our study and report.

Fry: I want to back up and ask you a question about those hearings. I wonder how so many pro-report witnesses were gathered.

Nelson: Because they had worked with us in developing the report. We created a public advisory committee, made up of every use-interest that there was. I've forgotten, but there must have been nearly

Nelson: two hundred people representing various interest groups on this advisory committee. We counseled with them and we counseled with the local levels of government every step of the way in developing the report. They were party of the first part, and they had been successful in getting a reasonable amount of their proposals and problems recognized.

Fry: And these were the people who showed up for the hearings, then?

Nelson: Yes.

Fry: How about Senator George Miller of Contra Costa County?

Nelson: Senator George Miller, chairman of the Senate Finance Committee, is an extremely strong man in the senate, a man who can go to the core of a problem quicker and more effectively than most anyone I know. He was most helpful in many areas dealing with the small craft harbor program. He was helpful in the problem of stripping, or getting interest aroused and some action initiated that would curtail the stripping and rocking of the Sacramento-San Joaquin river levees by the Corps of Engineers.

Fry: This is tree removal you're talking about?

Nelson: Yes. The Corps's program has been, and still is in large part, when they make major repairs to the levee, to strip everything off, reshape the levees, and cover them with rocks. This destroys the whole aesthetic and much of the recreational values. Some progress in this field was made during the past year when Colonel Robert Mathy was the District Engineer for the U.S. Army Corps of Engineers, headquartered here at Sacramento. He largely reversed the entire philosophy and concept of the Corps in regard to rocking. They are now beginning to recognize the importance of protecting some of the aesthetic values of the levees, and we are trying to get support for this type of program through Congress.

Fry: On this levee problem, was any of that caused by the farmers who did not want the trees there because they thought that they used too much of the irrigation water?

Nelson: No, not in that regard. Even among the farmers there is a difference of opinion. Many of the farmers believe that the trees are helpful in the protection of the levees. Others want to clear them off, strip them down, so they can burn them and easily detect the presence of rodents in the levees. The rodents burrow through the levees, which creates leaks; during high water periods, these leaks can cause the levee to burst. We have just finished a report on the development of a master recreation plan for the Sacramento-San Joaquin Delta region. I don't know if you have seen this or not.

Fry: No, I haven't.

Nelson: If you're interested you can have this copy. [Referring to report] This is a far-reaching plan in which all the departments of the resources agency participated. I was chairman of the committee charged with developing the plan. We hope that this will provide the foundation on which we will be able to develop the multiple use concept of the Delta region. You see, the levees were constructed by the landowners originally for flood control purposes. This is the greatest recreational waterway in the West, a veritable Everglades of California. It is very popular for fishing, hunting, water skiing, boating, and all water-associated sports and recreation. Because this is also an extremely rich agricultural area, we find many conflicts of interest in this region, which covers about 740,000 acres in which there are nearly a thousand miles of waterways--probably more conflicts than any other area of equal size in the state.

We have the conflicts between recreationalists, fishermen, and speedboaters, for example; conflicts between the agriculturalists, who are concerned only with flood protection, and with the boating and recreational public; conflicts between the agriculturalists and the sportsmen; and conflicts between navigation and other interests. So there are some real problems here.

The report which I referred to sets up a master recreation plan which involves not only the state but all the local levels of government and private industry as well. It will be a long time in accomplishment, but we hope that it will at least provide a framework for solving some of the problems and result in protecting the total values of this beautiful and productive region. Unfortunately, the levees were built too close together to provide an adequate waterway during flood periods. Over the years, much of the levee berms have been eroded so that now the narrow levees are more critically exposed. Therefore, to provide maximum protection, the Corps is reshaping the levees and facing them with rock. We have conducted experiments with various types of vegetation on the levees and on the berms, in an effort to stabilize the levees and provide adequate flood protection. These experiments have not been very successful. Erosion of the levees is now being accelerated by the wake-wash from speedboats and water skiers. Some rocking will have to be done to protect the levees.

Fry: Can this recreation plan be implemented primarily by just cooperation of all participating agencies and industries, or does it have to be legislated?

Nelson: Oh, there will have to be legislation for it. Assemblyman Jerry Waldie and Senator Albert Rodda have been the dynamic pushers in this area.

Nelson: The implementation of this plan or any overall land and water use plan for the Delta region will have considerable opposition from those who have only the one purpose in mind, that of flood control. All the uses--agriculture, navigation, recreation, fish and wildlife--need flood control. We believe that these uses can be made compatible, but it will cost money and will require close cooperation from all public and private organizations.

Fry: Let's see. What about Francis Lindsay?

Nelson: Oh, Francis Lindsay, a former assemblyman from Loomis. His district took in several mid-Sierra counties. Francis was a dynamic force in the field of soil conservation. He is a crusader type, a dynamic individual and a driver. He really took hold of the soil conservation program and went to town with it. He got legislation through that authorized $750,000 a year from the oil and gas revenues for a grant-in-aid program to the soil conservation program. That was 1957.

But it so happened that Governor Goodwin Knight blue-penciled it and cut it down to $100,000. That same legislation provided for $750,000 annual appropriation from the oil and gas revenues for research under the Division of Forestry. This program too was blue-penciled by Governor Knight down to $100,000 a year. This $100,000 has continued since that time. However, it no longer comes from the oil and gas revenues, but is a general fund appropriation.

Fry: And Assemblyman Lindsay hasn't been able to up this figure any, then.

Nelson: No, Assemblyman Lindsay no longer is in the legislature. But he left his imprints as far as soil conservation is concerned.

Back in the forties, in cooperation with the U.S. Forest Experiment Station, we started the soil-vegetation survey. This is a combination survey of the soil and the associated vegetation. We have a composite-type map showing the nature of the vegetation and the kinds of soils. There is published with each soil-vegetation map a description and the characteristics of the individual soils, including their permeability, their erosiveness, their capacity for timber growing or grass growing, or whatever it might be.

Under this program we have completed surveys in all the north coast counties and some of the upper Sacramento Valley counties. So far we have covered some eight million acres of the state's wildlands. We are now working in Calaveras, Yuba, and Butte Counties on another million and a half acres. This is now becoming very important information because of the proposed water development

Nelson: program and projects in the north coast area. This soil-vegetation information provides an important tool for the wildland manager because it provides information on the soils' productive capabilities. In this program Senator Carl Christensen of Eureka was very helpful.

Fry: May I ask you about some more senators here? I have Senator Presley Abshire, Jack Slattery, and Walter Stiern--are any of those--

Nelson: None of those senators were leaders in our field of activities. However, they were generally supportive.

Fry: James Cunningham was a senator, too.

Nelson: Yes, Senator Cunningham was in the senate for a short time from San Bernardino. He gave us some assistance in a fire protection budget and also in some of the recreation programs. As I recall, he was only in the senate for one four-year term; consequently, his effectiveness was limited.

Fry: Hugh Donnelly.

Nelson: Senator Donnelly was a grand old man. He was one of the oldest senators. He was chairman of our senate finance subcommittee, and while he never carried any legislation for us, he was usually supportive.

Fry: Probably the rest of these that I have down here were ones that you might class as just supportive. The Assemblymen Arthur W. Coats, Myron Frew, Bert De Lotto, C. L. Guthrie, Marvin Sherwin--

Nelson: Those--I can only say they were supportive, yes.

Fry: What about Pauline Davis?

Nelson: Oh, Pauline Davis. We must not overlook her. Pauline Davis succeeded her husband in the assembly, upon his death. She is from Portola. Her district takes in all of northeastern California--many counties. I know of no legislator who works harder at her job in representing her constituents than Mrs. Davis. Many people have had their problems with Mrs. Davis; she and I have had our differences of opinion. But I have found her, down through the years, to be very helpful, very cooperative, and very supportive. While we have had our differences, we usually sat down and worked them over and generally came to some agreement. In every case, Mrs. Davis has not only gone with us but has introduced considerable legislation and carried legislation to help us.

Fry: I notice she was on a field trip with the State Board of Forestry in the seventy-fifth commemorative session. (This was about 1960.)

Fry: I wondered if this indicated that she just had a natural interest in these things, or was she on a committee?

Nelson: She's on a committee. She, for some years now, has been chairman of the fish and game committee. And last year she got that committee's authority broadened to include conservation as well as fish and game. Pauline is a staunch supporter of the soil conservation program. Just this spring she started to hold hearings in an effort to develop and strengthen the soil conservation program, both legislatively and budget-wise. She is making a sincere attempt in this area. Her first hearing on this subject was held in July in Riverside County, a three-day hearing which brought out many very fine facts and information.

Fry: Is this legislation which she's considering possibly something that can embody the Forest Practice Act--suggestions that are being made just now to control cutting along streams and erosion?

Nelson: I don't think she's pointing in that direction. Whether she will or not, I don't know. If legislation of this nature, which is reasonable and equitable, can be developed, I'm sure she will support it.

Fry: But so far it doesn't have too much to do with forestry?

Nelson: No. She's dealing primarily in this series of hearings with soil conservation and flood control within the Division of Soil Conservation's statutory limits.

Her district covers the wildland areas of the northeast. Under reapportionment this year, her district will also include Siskiyou County, Del Norte County, and about half of Humboldt County--a tremendous district. So she is concerned with our wildland resources; she's concerned with the economic welfare of the mountain counties, which are dependent on those resources. And she's really in there doing a job for her constituents.

Fry: Now we've kind of got the picture of some of the major figures that you could go to when you needed help. But what we don't have a picture of is your place in all this. Exactly how did you manage to gather support when you needed it, and so forth?

Nelson: I don't know as I can answer that. When I became state forester, I handled all of our legislation and all of our budget before all of the committees. In that process I was able to get acquainted with the legislators. There was one thing of which I was very jealous, and that was to deal only in facts with them. I think I successfully established a reputation for dealing in facts, to the point where I had established a level of confidence and a level of integrity which is the most precious thing we have. On that basis, I was able to work with most of the legislators.

Fry: And you continued this, then, as you became director?

Nelson: As I became director, I continued very active work in all of our legislation and budgets. Because of the magnitude of our budget problems, I lost much of the detail. I had to rely more and more on my chiefs. But I was always there with the initial statements, and setting for the programs and the concepts and letting the chiefs fill in the details.

Fry: So they attended the hearings with you?

Nelson: Oh yes. They provided the details.

Fry: Were you able to work individually with senators and assemblymen outside of the committee hearings?

Nelson: Yes, I was usually welcomed in most of the offices.

Fry: What about such people as Alan Post, the legislative analyst?

Nelson: Alan Post, in my mind--of course, I worked with Vandegrift prior to his death (Alan Post succeeded him)--is one of the most intelligent and I think fair men I know. He's got the toughest job in state government. I've violently disagreed with Alan Post and his staff on many issues. We have had some pretty good differences of opinion before legislative committees. But our batting average has been pretty good; he'd win some and we would win some. However, we always retained each other's friendship and respect. We recognized it was part of the game. He had a job to do and I had a job to do, and we both went in and did the best job we could. We'd win a few and he'd win a few, but I think our batting average wound up in pretty good shape.

Fry: A sort of a tie, would you say, or--?

Nelson: Well, I like to think that I came out a little bit ahead in most cases! [Laughter] For example, in last year's budget on the $500,000 which finally got into the governor's budget for fire prevention, Post cut that down by nearly a half that amount, and we came out with the total fund.

Fry: Oh, you did? How?

Nelson: The governor supported us; Mr. [Hugo] Fisher, the Resources Agency administrator, supported us; and, of course, it was the governor's budget, so the Department of Finance had to support us. And we got help from some legislators, and we won.

Fry: You make it sound so easy. You got help from those legislators and--[laughter]

Nelson: Well, it's something you have to work at all the time. Just part of the game.

Fry: This was another question I wanted to ask you. I doubt if you just go see Mr. Post at hearings, for instance. You do work with him outside?

Nelson: We work with his staff very closely and occasionally get together with him. In recent years, we have even associated socially! [Laughter] No, I have a tremendous admiration and regard for Post. He's got the toughest job in state government. He's an excellent analyst, but I can't agree with some of his staff analysts. He has to, of course, accept the judgment of his staff; some of his staff are very narrow-minded, in my opinion.

Fry: What about Jimmy Dean, the director of finance?

Nelson: Jimmy Dean, director of finance under Governor Warren, was a wonderful man. When Governor Warren appointed a new Board of Forestry in 1943, he called them into a meeting and told them he wanted to get certain types of programs going. It was from that start that the Board and ourselves and the Biggar Committee worked together in developing the legislative program of the mid-forties.

Jimmy Dean was with us on that; he was with us on many of the field trips, as was Vandegrift, the legislative analyst. They recognized the need for these programs, such as the Forest Practices Act, an orderly method of clearing brush ranges with the use of fire, a workable method of controlling forest insect infestations, a more effective fire prevention and control organization, and a reasonable amount of state owned and managed forests.

There was money available at that time because the demands were relatively small for many public programs in education, corrections, welfare, and so forth, as compared to now. Also, the state's population was much smaller. There was money, and here was a program they could bite their teeth into, and they were with us. As former Governor Warren (Chief Justice Warren) said at my testimonial dinner last Friday night [August 19, 1966], "There are now two million more cars in California than there were people when I became governor." It's rather an astounding change. This has changed the pressures and demands for everything in government. And there are some public programs that--particularly in education, corrections, and welfare--that have gotten preferential treatment over our programs in recent years. I can't disagree with some of the current priorities.

Fire strategy discussion in fire dispatch office during critical fire period (September 1965). Center: Walter Shennon, Director, Department of Fish and Game, and DeWitt Nelson, Diractor, Department of Conservation. With cigar: Paul Cox of the Division of Forestry

DeWitt Nelson's testimonial dinner, August 17, 1966. Left to right: Former Governor Goodwin J. Knight; DeWitt Nelson, Director, Department of Conservation; U. S. Chief Justice Earl Warren; and Former Governor Edmund G. (Pat) Brown.

Past Presidents of the Society of American Foresters. Left to right: Elwood L. Demmon (1954-1955), DeWitt Nelson (1956-1957), Charles A. Connaughton (1960-1961), George A. Garrett (1958-1959), and Paul M. Dunn (1962-1963).

Retiring Newton B. Drury, Chief, Division of Beaches and Parks (1959) and DeWitt Nelson, Director, Department of Natural Resources.

LAND USE: PRIVATE AND PUBLIC

Fry: This would seem to indicate that your bread and butter might lie in the thesis that the forests are needed for all people. You might have to recognize the need for more recreation and things like that.

Nelson: We have got to come to the concept that we can't, we just can't dedicate all of our lands to a single use. We must dedicate and preserve a reasonable portion of our unique lands, such as some of the redwoods, our wilderness areas, and some of our best recreational lands--yes, they must be dedicated to a single type use or a dominant use. But the rest of the land must provide multiple uses, just like the Delta waterways; they must provide recreation, fish and wildlife, irrigation, flood control, aesthetics, and everything.

Of course, we in this department are dealing primarily with the private landowner. This is the only department in the resources agency that is really concerned with private ownership and private operations. It is much different from dealing with a publicly owned resource. Therefore, what we accomplish has got to be accomplished in cooperation with the private owners, or through regulation. And of course, everyone opposes regulation. We're having to move into more and more regulation, and the private landowners have got to recognize that they owe a responsibility to the public to provide certain opportunities on their land for public use. At the same time, the public has got to recognize that these are private lands and they (the public) too have a responsibility. Vandalism, littering, carelessness with fire--that's why there are "no trespass" signs on much of the privately owned lands; the owners just can't afford the risk to which public use exposes their property. I think in many respects the private landowners have recognized, are recognizing their responsibility more rapidly than the general public is recognizing their responsibility to the private owners.

Fry: Well, this has to develop both ways, I guess, as population continues to increase.

Nelson: Absolutely.

Fry: Therein lies the problem of public education.

Nelson: Right. And another thing: In the field of recreation, the public agencies have preempted the field as far as camping, picnicking, and things of that nature are concerned. These facilities are really subsidized in whole or in part by the public. So the private landowner can't put in those types of facilities and compete with public operation.

Fry: So that I guess the idea of paying for part of this through taxes, then, is what the private landowners are up against.

Nelson: Well, the private landowners are being burdened with an ever-increasing tax load. It costs a lot of money just to haul the garbage off of a picnic site and campground and to protect it from fire and to maintain the sanitary facilities. Our Division of Beaches and Parks figures the construction cost of developing campgrounds is around $6000 to $7000 per camp unit. In addition, there is the annual cost of maintaining it and keeping it clean and sanitary.

Of course, there are the liability risks. If anyone goes on those lands at, say, the invitation of the owner--and a picnic site is an invitation from the owner--he then may be held liable for any accidents that they may have. There have been cases of damage suits for that. So it's not as simple as it might sound.

Fry: Has there ever been any consideration during your term of office here to press for any kind of tax exemption for owners who would contribute some of their land towards recreation?

Nelson: It's been talked of some, but nothing has ever developed from it. Something of this nature may develop, may have to develop.

TIMBER MATURITY BOARD: TIMBER TAXES

Fry: I would like to ease into other questions on taxation here. I think a timber maturity board was formed just at the end of your career as state forester, is that right? In 1952?

Nelson: No. The constitutional amendment 12 3/4 was passed in 1926. It provides for the exemption of vineyards and orchards from taxes for five years, and exempts the timber from tax for a period of forty years or until the timber reaches a point of maturity. This does not relieve the owner of a tax on the land; the land is taxed, but the vines and orchard trees and forest trees are exempt for the prescribed time period.

In the case of forest trees, if 70 percent of the timber is harvested, then the remaining timber and the new growing timber is tax-exempt for forty years or until mature. The constitutional amendment provides for a maturity board to examine and determine when the timber has reached maturity and should be put back on the tax rolls.

Fry: On the timber maturity board, I had the idea that the board didn't really function until you were--

Nelson: You are right. But, you see, Section 12 3/4, passed in 1926, provided a forty-year period of time. There was a relatively small amount of cutting prior to 1926. Sure, we were producing lumber; but even as late as 1940 we were only producing about two to two and a half billion board feet of lumber a year, as compared to five and a half billion board feet now. So it was not an issue. The tax problem, and the need for more tax revenues, was not as urgent at that time, either.

Fry: In other words, this was when the first forty-year growth period was beginning to come to a close?

Nelson: That's right. And this came to a head in the early 1950s, when Mendocino County and Sonoma County started looking for more revenue and decided to put some of the cut-over lands back on the tax rolls.

Nelson: At that time, we got together with the Board of Equalization and endeavored to work out, and did work out, a procedure by which the lands would be examined and put back on the tax rolls. If the maturity board, made up of a representative of the State Board of Forestry, a representative of the Board of Equalization, and the county tax assessor, concurred, after a field examination, that it should go back on the tax rolls [then it was placed on the tax rolls]. Since then, there has been an ever-increasing demand to get more of this timber back on the tax rolls.

There were some operators who had harvested second-growth timber that never was on the tax rolls. This, of ocurse, was not right. So this stimulated action on the part of the county assessors. We finally, in the last budget--'65--got one man on our staff to work with the Board of Equalization and the county assessors in examining these lands as to whether they should or should not go on the tax rolls.

Fry: In other words, he would determine the maturity of the tree.

Nelson: Yes. He would represent the State Board of Forestry in the maturity board. Of course, it's sort of a stacked deck because the Board of Equalization and the county assessor have only one primary interest in mind, and that's to get everything on the tax rolls. We sometimes take the other point of view. What is maturity? There are various classes of maturity--biological or physiological maturity, merchantable maturity--

Fry: Just utilization, then?

Nelson: Yes. Ultimately, I think there are going to have to be some amendments to our tax laws. As we go into a second-growth timber economy, we might want to go into a yield tax program of some kind.

Fry: I wondered if that had ever really been considered.

Nelson: It's been considered and studied. But when you're cutting old growth timber, on which the landowner has paid taxes for years and years, and you then burden him with a yield tax at time of harvest, it would be a form of double taxation. In some states, where all or most of the timber is second-growth, they do have a yield tax. This is not a steady income, however, for the county; as the market fluctuates and the harvesting ebbs and flows with the market, the tax revenue will ebb and flow with it, and that can be rather damaging to local economy. Remember the yield tax applies only to the timber; there would still be the annual ad valorem tax on the land.

Fry: What has been the viewpoint of CFPA on both of these issues--both definitions of timber maturity and yield tax?

Nelson: They have opposed yield tax up until now, for the reason I mentioned. They recognize that when timber is mature it should go on the tax roll. All they're trying to do is get a fair treatment in how much the tax burden should be. There was some legislation passed at the last session that gave the Board of Equalization certain authority and direction to get the trees on the tax rolls. There is being considerable debate in this area. It is still unsettled.

Fry: According to my notes, there was a tax study in 1956 and '57, and I think you just referred to that a while ago--the State Board of Equalization, the Board of Forestry, the county assessor, and somebody at the University at Berkeley.

Nelson: Yes. That study was made by Dr. Henry Vaux?

Fry: It would be logical for him, but I'm not sure. I was wondering what that study came up with and if it helped in the job of administration.

Nelson: It provided an interim vehicle by which we worked together in determining what lands should and should not be placed on the roll. This has been somewhat replaced now by the legislation which was passed at the last session. However, we still must carry on our field examinations and make our determinations jointly as to whether they should or should not be placed on the tax rolls.

Fry: What I can't understand about this is what provisions are being made for changing utilization concepts and practices in timber use. In other words, I've seen trees that are no more than five inches in diameter being cut down for use as pulp.

Nelson: Not in California.

Fry: No, but I suppose this will happen in California.

Nelson: It may come. Today all of our pulp production is being made from the waste material from the sawmills, and some cull logs from the woods. The time will come when we will be cutting small timber for pulp purposes. This will be for stand improvement or this is done for thinning purposes, which will be good forestry. That time is only a few years in the future, in my judgment.

Fry: Oh, really?

Nelson: Yes. We'll be relying in large part on chips from waste material from the sawmills for sometime to come, and we will be using thinnings for other things, such as studs.

Nelson: This is a technological development that is providing for a high degree of utilization. This material used to go into the waste burners and was lost. Today we are utilizing it, creating a commodity out of it. And it's making for a much better cleanup in th the woods because they can use material that can't be processed through a sawmill, and it's using material that no longer goes into the waste burner. We are exporting a large volume of wood chips to Japan; so there is a foreign market for what was a waste product only a few years ago.

Fry: What's your opinion on how our present tax laws could cope with this? It sort of shoots any maturity ruling--

Nelson: At that time, they'll probably go to some type of a yield tax. But that's a ways in the future.

Fry: Have you felt that this was adequate, then, for your administration?

Nelson: I am not a tax expert, by any means. It's one of the most involved problems and issues that I know of, and I'm really not competent to discuss the problem in any detail. However, we are complying with the Section 12 3/4 of the constitution. One does not change the constitution very easily.

Fry: You're glad you live in a state where there's a board of equalization, huh?

Nelson: Yes. But I am concerned with it because excessive taxes can force liquidation of a resource. If that ever happens, then it will be a sad day.

Fry: I want to cover just one more point. This is all I can think of that we have left on the forest side, and this has to do with the timber resources survey, which was done in '53 and '55.

The Timber Resources Review

Fry: I understand that there was some opposition to participation in the national Timber Resources Review on the part of CFPA and perhaps some others. Could you give a run-down on what the state did as a part of this?

Nelson: We gave some cooperation to the Forest Service on this. However, the Forest Service did it in large part on their own, gathering the resource data from every available source. There was opposition from the Forest Protective Association. I guess the industry didn't like to have the government delving into their records. The

Nelson: natural aversion to new approaches and the methodology that was used and the difficulty of getting good factual information--because this is such a far-flung thing, we don't have detailed inventory of all of our resources.

But the Forest Service, under Chief McArdle, worked out a program in which he got fair cooperation. That study and review brought out a tremendous amount of good factual forest information in regard to what our resources amounted to, what our future needs were predicted to be, and what the timber growth is. When it finally came out, while it was criticized, as most things of that nature are, it was generally accepted as the best data available. The last review was--and I think everyone agrees--made with a sounder base of information.

Fry: That was the one about two years ago that you're talking about?

Nelson: Yes, and that it recognized and determined that the forest growth, in cubic footage, at least, is rapidly approaching a balance with utilization. On the west coast we still have a large volume of old-growth timber. We have some three hundred billion board feet of timber left in California. This is old-growth and young-growth. So we still have a big resource base here.

As long as we have old-growth timber on a piece of land, the net loss in volume is greater than the net growth, because of over-maturity and higher mortality of the trees. We don't get increased growth until we get young stuff coming along. That's one thing that the preservationists apparently can't understand. Our heavy losses are in old-growth timber from natural die-off, from insects, disease, and wind-throw. Old trees are like old people--more susceptible to infections and disease than a young person.

In the mature stands we don't have an increase in cubic footage per year because they've practically stopped growing. It's a static thing, either a static thing or a declining thing. So we may have--and we do have, in much of our old timber stands--a net loss each year.

Fry: I would like to supplement some other interviews I've made on this Timber Resources Review, if you can remember very much about what went on then. As I remember, there was some resistance to actually letting either records or private lands be inspected for this sort of survey.

Nelson: I think there was some of that. I didn't get very deeply involved in the survey, so I don't remember any of the details. But there was, I know, some resistance. I know that the Forest Service had some rather violent meetings with industrial leaders at times,

Nelson: particularly at the national level. Their response varied with the willingness and the openness of the particular owners. Many ownerships are very jealous about protecting their inventory data. There are many aspects to it, I guess--taxes, for one thing. Some people charge that they have two sets of books, one for themselves and one for the tax collector. I don't know whether that is true or false.

Fry: Would it be that they feel they don't want other timber companies to know the exact figures of certain of their stands, or--?

Nelson: There is a certain amount of that, and it's just human nature, I guess. They don't like everyone to know everything about their business. You find it in the oil industry; you find it in the mining industry. They like to protect their own knowledge and their own technological developments as best they can. It's a highly competitive industry. They don't like to share too much. Yet when the industry as a whole becomes involved, they get together. I think that this is one of the handicaps that our timber industry is faced with; there is no common spokesman. There are thousands and thousands of timber owners. We have throughout the nation an estimated forty thousand sawmills, most of them small. They produce a lower quality product than the major owners. The major owners carry all the advertising and all the burden of the handling of public relations and legislative matters. The little owner gets a free ride and often causes much of the industry's image troubles.

When you compare this with the aluminum industry, for example, I think there are five major aluminum companies, all big, all national or international. They can put out a standard quality product; they can consolidate their advertising. That way they can compete because they can control the product that they produce. That is not true in the timber industry, where there are thousands of little operators putting out a variety of products with all levels of quality.

Fry: At this time of the review, was the Forest Service able to use any statistics that your division had on hand?

Nelson: We gave them all the information we had. In 1947, I think it was, the American Forestry Association initiated a sort of timber review, nationwide; and in that study we played a very dominant role.

Fry: Did you get $100,000 appropriated to intensify forest survey then? Is that the one? I have a note here that in 1947 this much was appropriated and extended to state and private lands.

Nelson: We didn't get any money for that.

Fry: Maybe that was a federal appropriation.

Nelson: We didn't get any additional funds. It must have been a federal allocation to the Forest Service. It must have been that.

Fry: So you just did that?

Nelson: We did it on a contributive basis. We worked with the industry, gathering as much of the material as we could from them.

Fry: And did CFPA help in that?

Nelson: Yes.

DIRECTOR OF NATURAL RESOURCES, 1953

The Appointment

Fry: Then in September of 1953, you were appointed director of Natural Resources; was this in the wind for a considerable period before that?

Nelson: Not very long; I guess about a month in advance. General Warren T. Hannum, who was then director of the Department of Natural Resources, reached the maximum age of seventy and had to retire. It was upon his retirement that Governor Warren appointed me to the directorship of the department. My diary for September 4, 1953, reads as follows:

> 9:30 - State Fair Grounds, Fire Prevention Conference with Harry Perry (Tulari County) re County Supervisor Association's fire prevention program. Good progress.
> 11:00 a.m. - to dentist. Governor Warren called me out of the dentist's chair and I reported immediately. He offered me the directorship of the Department of Natural Resources. I accepted.
> P.M. - Conference on departmental problems with General Hannum and Dan Blood.
> Evening - Sadiebelle and I attended wedding of Earl Warren, Jr. You had a big day, little man.

It so happened that a very short time later President Dwight Eisenhower appointed Governor Earl Warren to the U.S. Supreme Court as Chief Justice. I remember I was attending a meeting of the Association of State Foresters in Kentucky when [Lieutenant] Governor Knight took over. That meeting was followed by an American Forestry Association's policy forming conference in Washington, D.C., about two weeks later. So I took vacation in between the State Foresters meeting and the AFA meeting, during which time Mrs. Nelson and I traveled through some of the southern and Appalachian states. While I was on that trip, I followed the

Nelson: usual pattern of submitting my resignation to Governor Knight in order to give him an opportunity, if he so chose, to appoint another director with minimum embarrassment to him. However, very happily, he did not accept my resignation and reappointed me upon my return to California. Of course, he carried out the rest of Governor Warren's term and then was reelected, at which time he again reappointed me.

Fry: This put you in charge of soil conservation.

Nelson: At that time, we did not have a division of soil conservation as such. There was a soil conservation commission, which was a rather loose-knit organization. We had one man and one stenographer on the payroll. Sven Anderson was secretary to the commission.

In the Department we had the Division of Forestry, the Division of Mines, the Division of Oil and Gas, the Division of Beaches and Parks, and the Division of Recreation. In 1955, with the leadership of Assemblyman Francis Lindsay, we got legislation which created the Division of Soil Conservation and developed a small staff. In 1957, under the leadership of Senator Jack Hollister, legislation was passed which established the Division of Small Craft Harbors.

Reorganization of State Departments

In 1961, under Governor Brown, we had a major reorganization of state government in which four agencies were statutorily created, one of them being the Resources Agency. In that shuffle, the Division of Beaches and Parks, the Division of Recreation, and the Division of Small Craft Harbors was taken out of the Department of Natural Resources and there was created a new Department of Parks and Recreation. This left four divisions, all dealing with the "extractable" resources in the new Department of Conservation, to which Governor Brown appointed me as director.

Fry: Then, you had the recreation-type activities under you for about eight years.

Nelson: Yes.

Fry: And maybe the first thing you could go into would be the Division of Beaches and Parks.

Nelson: Okay.

Fry: I wonder what your main points of contact were with both Chief Newton Drury and the California Department of Fish and Game.

Nelson: First let us dispose of Fish and Game. In 1951 the legislature took the Division of Fish and Game out of the Department of Natural Resources and made it a Department of Fish and Game. Governor Earl Warren offered me the directorship. I turned it down and urged that he appoint Seth Gordon, who was nationally recognized in that field and who was then making some special studies for the Department. Now we can go to Beaches and Parks.

Of course, beaches, parks, and recreation have always been important programs in California. Newton Drury was the chief of the Division of Beaches and Parks. Formerly, he had been director of the National Park Service. For years he had been a leader in the Save-the-Redwoods League, which was formed by a group of citizens in 1918.

Newt Drury was a very interesting and able man. He was a purist at heart, as far as preservation and parks were concerned. He had less interest in recreation per se than he did in preservation, and particularly in the acquisition and preservation of redwoods. As I have mentioned before, the state of California and the people of the nation owe to Newton Drury a debt of gratitude for his accomplishments in acquiring, not only through the park program but through the Save-the-Redwoods League, much of the redwoods we have in our state parks today.

We didn't have much money in those days. We had been using a certain percentage of the oil and gas revenues, so the Division was a special fund agency. When the federal government declared that the offshore tidelands were federal property, the oil and gas receipts from offshore lands were frozen; so P and R money was very scarce. At that time, legislation on the books authorized us to buy certain parks and recreational areas, providing their purchase price could be matched. One was in the redwood region, using Save-the-Redwoods League funds for matching purposes. (So we were able to continue redwood acquisition.) The other area was in the beach program. Over the years, a number of the counties had acquired certain beach properties. They would put these up as their half of the contribution, which would then permit us to acquire additional beach properties within the county. That was a pretty slow and rather difficult process.

Acquiring Additional Parks and Recreation Land: Tidelands Oil Money

Nelson: It must have been 1954 or '55 when the supreme court made the decision that the tidelands were state property.

Fry: I think it was about 1954. That may have been the time they were released from escrow by an act of congress.

Nelson: Something of that nature.

Fry: And you suddenly got $58 million.

Nelson: Correct--all at once we had money.

Fry: And according to my notes here (I might as well put it in), $41 million was for acquisition.

Nelson: Is that what it was? Anyway, we finally came into some money. So there was a demand for action and a request by the legislature for Beaches and Parks to develop a park and recreation acquisition program. I think it was in 1956 when we put that out. Do you have that date?

Fry: I've seen two. One was a 1955 five year plan and one was a 1956 revised.

Nelson: 1956 revised.

Fry: And I guess the first one was vetoed, wasn't it, by Governor Knight?

Nelson: My memory doesn't serve me, but I do recall the 1956 plan. Anyway, one of those plans, which pretty well committed the $41 million, was finally accepted, with one exception. We had in that program the acquisition of Cascade Lake and the surrounding land, which is located just over the little hogback ridge from Emerald Bay on Lake Tahoe. That was in our proposed acquisition plan. Assemblyman Francis Lindsay took that out and substituted the old ghost mining town of Bodie as an historic monument. That was the only change made in the plan. Of course, during this period, there were tremendous arguments and pressures up and down the state and with the legislature as to what we should buy and how much and what we should pay for it. It was a very trying period.

Fry: Everybody wanted something.

Nelson: Everybody wanted in the act, and everybody had their own pet projects. It was a rough piece of water we were sailing in those days.

Fry: It was a more trying period than your poverty-stricken time?

Nelson: In some ways it was, because here was money, and while I don't like the term "pork barrel", it had some pork barrel aspects to it. Everybody wanted their pet projects, and many legislators had to take something home to their constituents.

Fry: Did you have to concede very much in this 1956 plan, or was this primarily made up of the acquisitions that were recommended by this last plan?

Nelson: The 1956 plan stood up very well. It was pretty sound and well balanced. In fact, much of it has been accomplished. The only change in the plan that we finally came out with was the trade of Cascade Lake for Bodie.

It was about that time that the legislature relieved us of the matching requirement, which made it possible for the Division to go ahead and acquire land without involving a third party. This opened the door and made it possible for us to purchase some inland properties where we had never been able to develop matching funds. Prior to this, most purchases had been restricted to beaches and redwood groves.

Of course, the acquisitions proceeded painfully slow. The Department of Finance established purchase policies and procedures that severely restricted negotiations and forced most purchases to go through the courts by condemnation.

Fry: You had a lot of litigation on this?

Nelson: We certainly did. Unfortunately, the attorney general's office was inadequately staffed to handle these cases. The attorney general's office finally put together a team in the Los Angeles area that did nothing but handle park acquisition condemnation cases. This worked well, but they never were able to get a team put together in the northern part of the state. It was a very frustrating process.

Fry: This was lost, I guess, subsequently by some oil and gas litigation.

Nelson: Yes. A short time after that, there started to be a decline in the oil revenues, and there were other demands for the oil revenue. The legislature cut our special fund item to about twelve million dollars a year. That included, as I recall, both acquisition, development, and operations. Consequently, very little money was available for development and acquisition. So here we again had some difficult times with everybody clamoring for their project to be number one on the list. At the same time, many of the owners of the land that we wanted to acquire did not want to sell, or they wanted such a high price that we were forced into condemnation.

Fry: The oil and gas legislation in 1955, which authorized the State Lands Commission to refuse to grant permits to erect any structure on tidelands that might interfere with the recreational use of such lands, might have cut back on the income from this. Was this a problem then?

Nelson: I don't remember exactly what caused the cutback on income at that time. I think part of it was a decline in production from existing fields.

Fry: Prohibited from leasing the tidelands for oil production?

Nelson: There was a long period in there when there was strong debate whether or not the Division of Lands could lease tidelands for oil production. Also whether they would permit the construction of "islands" for offshore drilling purposes. Many counties, Santa Barbara being one of the strongest holdouts, wanted no "islands" out in the ocean; it was sacred view country. It was quite some time before the Division of Lands was able to get legislation through that permitted them to lease the offshore lands. Because not only was the debate from the aesthetic point of view, but what would the royalty rates be, and what was the pollution potential? So there was a long and heavy debate in the legislature on that. It was finally resolved, but I do not recall the details.

The offshore leases were in certain acreage units, on a competitive bid basis--not only on a royalty per barrel of production, but also a bonus royalty--and some of the bonuses were in the four and five million dollar class. That helped considerably, but it was about that time they cut our share back to the $12 million.

Fry: That $12 million didn't cut down on the impounded funds, did it? It didn't cut down on the lump sum that was originally given for acquisition purposes?

Nelson: No, it didn't cut into the $41 million lump sum. We were still working on that. I'm not sure whether that's all spent now [1966] or not.

Fry: Do you remember any strong move by the legislative analyst on this, to use these oil monies for a general natural resource fund, including more than parks--soil conservation, forestry and mining research, and water problems, fish and game, and so forth?

Nelson: No, I don't remember the analyst moving in that direction. Alan Post, the legislative analyst, maintained that special fund budgeting is not good budgeting. The legislature finally made the Division of Beaches and Parks a general fund agency. I testified in favor of the general fund concept before the Ways and Means

Nelson: Committee. I based my judgment on my experience with the legislature's treatment of general fund units of government. Some wanted this resource revenue plowed back into the resource agencies. But it never developed enough steam to become an actuality. Our Division of Oil and Gas, a regulatory body, is a special fund agency. That money comes from a levy against each company's oil and gas production. There it seems to work very well.

Fry: Do you remember anything about the Randolph Collier bill to give the oil income to the county instead of to the state?

Nelson: I don't remember that specific bill, but there were attempts to give at least a percentage of the revenues to the counties from which the oil was extracted. But they were defeated.

Squaw Valley Project and the Olympic Games

Fry: One of the big issues of the mid-fifties was the Squaw Valley project, and I wonder who started this idea and how it came to you.

Nelson: Squaw Valley had some trying times, and those times are still with the Department of Parks and Recreation. True and complete history of Squaw Valley would cover a five-foot shelf of books, I'm sure. But if I can nutshell it.

Wayne Poulson had acquired all of the private land in Squaw Valley, with the exception of Southern Pacific lands, largely situated on the upper mountain slopes. Wayne Poulson was a commercial pilot for either American or Pan Am Airways. He was having difficulty in meeting his obligations to pay for these lands, and some way or other, he got connected with Alex Cushing on some kind of a partnership deal.

The story I get, which I certainly can't document, is that Alex Cushing got the key section, where Cushing's Squaw Valley developments are now located, away from Poulson. Consequently, there's been bad blood between them ever since. Cushing is a very peculiar individual; a man with obviously good promotional qualities and financial support. He's sort of a dual personality; he can be a perfect gentleman at times and he can be just the reverse at other times.

He is the man who went to the Olympic Committee, chaired by Mr. Avery Brundage, at a meeting in Paris. This must have been about 1954 or 1955. He proposed to the Olympic Committee that they hold the 1960 Winter Olympic Games in Squaw Valley. He presented

Nelson: them with a beautiful brochure and they accepted it as one of the invitations. He came back to California and sold the idea to some of the legislators, particularly Senator Harold T. (Bizz) Johnson, who introduced legislation in support of it on the grounds that it would not cost over $1 million. I guess it was in 1956 that the games were held in Italy. I remember Senator Johnson and a few other legislators went there to see how the games were handled--what facilities would be needed, and so forth. Finally, the legislature accepted the idea, passed the necessary legislation, and created the Olympic Authority.

Fry: What was that? What was the Olympic Authority?

Nelson: The Authority was a group of appointees, with Prentis Hale named as chairman. It was equivalent to a corporation, with authority to plan, to obligate funds, and to proceed in building the necessary facilities without having to process everything through the usual control procedures. It was generally assumed that the games would not cost more than $1 million.

That was a rugged four years for the Olympic Authority. There was another commission within the Authority which handled certain phases. I'm hazy on just what their division of responsibilities was, but they put together a concept and a plan and built the Olympic Village. They got from the federal government permission to use about a thousand acres of Forest Service land for ski lifts, etc. They were able to acquire, after much, much strife and debate, about nine acres of privately owned land in the valley on which they built the Olympic Village, the skating arena, the outdoor practice ice rinks, the oval skate racing track, the chapel, the sewer plant, the fire house, the ice arena, and some parking area. However, they had to lease additional parking area in the meadow from Poulson.

All during this period there were tremendous arguments going on between Poulson, Cushing, and the Olympic Authority about land purchase developments of all kinds. Most of the problems seemed to emanate from Cushing. The news media seemed to nurture the quarrels, and the publicity was devastating. It got to be known as Squawk Valley, and it put the Authority and the State Olympic Committee in an impossible situation. They were confronted with every obstacle that man could design, and yet they had an obligation to have the facilities ready for use in February of 1960.

Some way or other, they accomplished it. They accomplished it, but they returned several times to the legislature for additional funds, which--figuratively speaking--spilled blood all over the saddle every time there was any mention made of Squaw Valley and the Olympics. The Department and the Division of Beaches and Parks

Nelson: got pulled into the act in regard to what lands should be acquired for construction of the facilities. Newton Drury recommended the acquisition of all the private land so we would have a state park as a result of the state's investment. Needless to say, this was killed. I still believe it should have been done.

Fry: In other words, this was devised from the beginning as something which could become a permanent state park later? This was always in there?

Nelson: No, not in the beginning, but as expenditures got to be greater and greater, it seemed that there should be some residue that would provide public facilities. So we, Beaches and Parks and the Department, designed a plan and proposed that the state should buy the whole valley. All the private land in it. As an alternate to that, at least buy everything that Cushing had, for his land held the keystone spot for all ski areas. In other words, he had the cash register when the games were over. That really hit the fan, and we were instructed by the legislature to stay away from their committee hearings. They wanted no part of such a plan. It would cost money, and every time Squaw Valley was mentioned, many of the legislators would see red. Anyway, the games went on. They were a wonderful success in every way but financially. In my judgment, they were sabotaged by Cushing and the news media.

Fry: I remember they were ready just barely in time.

Nelson: Just barely. And the weather--if they had been a week earlier or a week later, the weather would have been terrible. I remember I was at the opening ceremonies. I was sitting inside the ice arena where the parade of athletes came through. A terrific blizzard was blowing. But as Andrea Mead Lawrence skied down the mountain carrying the Olympic torch, the snow stopped falling and the clouds broke, and we were in brilliant sunshine. When the parade of athletes was over, I wanted to get out to the end of the bleachers and get a picture of the Olympic torch. By the time I got out to the end of the bleachers, it was snowing again! It was just like a--it couldn't happen again.

Fry: You didn't realize your power!

Nelson: Well, a chap told me he was in a box seat behind a couple of Austrians. He heard them say, when the sun broke out, "These Americans can do anything." [Laughter] The weather was good up to and through the entire games, and they were wonderfully well managed, and the television coverage was magnificent. But because of the bad prior publicity, the attendance wasn't what it should have been, so more money was lost. As I recall, this whole project cost the state approximately $17 million.

Nelson: It was shortly before Christmas that the question was asked, "What is going to happen when the games are over and the Olympic Authority is disbanded? What are we going to do with the facilities?" Well, there was only one thing to do, and that was to turn them over to the Division of Beaches and Parks. Here was a several million dollar investment in dormitories and cafeteria--beautiful structures. We had a big oval ice rink for which there was a terrific maintenance cost which many people wanted retained, but we just couldn't afford it. We had two outside hockey rinks, and we had a large press and administration building; two of them, in fact. The chapel, fire house, sewer plant, and the ice arena structure were financed by the federal government. All of this on nine acres of land, with the key to all of the slopes and all of the ski lifts centering right at Alex Cushing's back door, including two of the ski lifts built for the Olympic Games with public funds. Alex Cushing had the cash register. The state facilities were not strong revenue producers.

Fry: You mean he owned the facilities? The ski lifts?

Nelson: He owned the section of land and had his resort right where all of these ski lifts came together; so he had the entrance and the control of all the good skiing slopes. We had nine acres of land. We had the flood problem in Squaw Creek. We had nothing but the problems; he had the income. So we--Beaches and Parks--had to take over after the games were over. We had the problems of cleanup and of straightening out all kinds of property, because much of it was borrowed from the National Guard, the regular army, and many other organizations. They had also much purchased property. It was the grandest mess that anyone ever moved into.

And then, the legislature pressed and demanded that we get this facility under concession agreement immediately. Without documenting it, they demanded that we have it under agreement by the first of July as an operating unit of the state park system. Here we were trying to clean up all this property problems--the mess left as a result of the games; Cushing and Poulson were still at each other's throats; and I've never seen such a situation. We immediately tried to get concessionaires who were interested, able, and willing to take over a portion of the facilities, which included the ice arena, a magnificent structure (but again, a terribly costly thing to operate), the dormitories, and other facilities.

We had a number of proposals. One was a proposal from a man and his wife--I can't recall their names--from University of the Pacific at Stockton. He was a music teacher. He wanted to convert it into a large musical festival facility like Aspen, Colorado in the summertime. He was an idealist, a dreamer, but he didn't have a dime. He wanted us to underwrite all of his expenses and operations until he could get his feet under him. He couldn't raise any money.

Nelson: We had one other promoter who claimed that he had the backing of big oil interests in Texas, but he would not disclose who his backers were. His proposal was to buy out Cushing, which was a good idea. But he wouldn't give us any idea on what he had in the form of money. He too was talking in grandiose scale. We had a proposal from four young men who ran a bus concession out of San Francisco.

Fry: What?

Nelson: Yes, travel bus--tours concession--out of San Francisco. They too had no money. And then Al Stearn, who was on the Park Commission at that time, came up with a friend of his by the name of William Newsome, who had the support of Mr. Getty (son of Paul Getty, the oil millionaire). Getty's son was an associate of Mr. Newsome in some other activities, and he had assured Newsome of his cooperation and support. We tried to get an appointment with Mr. Newsome at a time when Park Commissioner Al Stern, Jeff Mugford (director of the Department of Finance), and several of his staff, Deputy Attorney General John Morris, Newton Drury (chief of Beaches and Parks), some of his staff, and myself [could attend]. The only date on which we could all meet was June 7th, which happened to be election day and a holiday for state employees. We went ahead with this date and met in the conference room of the Department of Finance and discussed the possibility of Mr. Newsome taking over the Squaw Valley facilities on a concession basis. This was subsequently followed with a series of meetings in which the attorney general and the Division of Beaches and Parks developed the terms of a concession contract on a percentage of gross income from the various facilities. The contract was for a period of thirty years.

We also worked out during that period a contract with Alex Cushing, because he was the only logical operator for the state ski lifts; this too on a percentage of gross revenues. We finally came into agreement and entered into a contract with Mr. Newsome.

On September 1st and 2nd of that year [1960], Senator Howard Williams, chairman of an interim committee appointed for the purpose of studying the Squaw Valley problems, called a hearing at Squaw Valley. This was the toughest two days of hearing I ever experienced. We were charged with holding a secret meeting because we met on a holiday, June 7th. We were charged with everything that one could think of, and the fact that we let this contract to Mr. Newsome for thirty years was inconceivable.

We were raked to ribbons in those two days. I made the greatest mistake of my life, as far as a legislative committee was concerned, in that I was so badly stunned by the charges that I failed to rebut many of the charges that were made. I have always regretted that. It got to the point that the committee requested

Nelson: Alan Post, the legislative analyst, to put an investigator on the job to see what profits myself and other members of the state service had made out of this concession agreement. They hired a former postal inspector to make the investigation. He looked under every table and in every drawer and into everybody's past, but he couldn't find anything out of order or anything to charge us with. We came out of it clean. But nevertheless, it was an unsavory experience.

Newsome has not been a happy choice; he turned out to be as difficult to work with as Poulson and Cushing, who continue to fight, particularly Cushing and Newsome. There never will be peace in Squaw Valley, in my judgment, until there can be a consolidation of ownership and operation. We hope that under new legislation, through some exchange of lands, the Division of Beaches and Parks can acquire the thousand acres of Forest Service lands that are involved. This will help a great deal, because not only are we and Cushing involved, but the Forest Service is also involved (many of Cushing's ski lifts are partially on Forest Service land). So here we have a three-way issue, and it is anything but harmonious.

Of course, it has been out of our department now for some years. I understand they are now getting pretty good revenues from the contract. However, the maintenance problem continues to be heavy. Squaw Valley, while the games were outstandingly successful, has been nothing but a headache from start to finish for everybody who has gotten involved with it.

Fry: Are some of your maintenance problems due to the fact that the buildings were not erected for permanent use?

Nelson: Many of the buildings were erected for temporary use. Most of those were torn down to make parking area space. Some of the plumbing was not put in per the contract with the Olympic Authority and has caused a lot of work in that regard; and some of the wiring was not of best quality. It was put up against pressure of time and short money, against very adverse weather conditions and with a constant dog fight between Poulson, Cushing, the Authority, and the legislature. All of this was kept stirred up by the news media.

Fry: Did you have any problems with the Authority?

Nelson: Not particularly. The Authority was an autonomous organization which went out of existence immediately after the games. In fact, Beaches and Parks had to take over at midnight of the last day of the games. They took over and started to clean up the property, inventory everything, and start the liquidation of all disposable property the day after the games were over.

Fry: I see. So you really had no contact with the Authority, then?

Nelson: Only in trying to clean up property. We did get involved in cleaning up some of their financial obligations. This was a dark page in history. Alex Cushing told the legislature that the games would not cost over a million dollars. They actually cost $17 million or more. Cushing was the one to profit most from the venture, and yet he was the key trouble-maker before and after the games. However, I don't think the state really lost money on it. It stimulated winter sports development all over the state of California. It stimulated new winter sports development around Lake Tahoe, on Donner Summit, on Mammoth Mountain, Mt. Shasta, and elsewhere. These have all been important to California. Money-wise, I think the state got more than its investment back.

Fry: Did you have any other board or commission to deal with? After you took over, was there a commission appointed, or was this handled directly by Newton Drury and yourself?

Nelson: Yes, through the Park Commission. The Park Commission was in on all this.

Fry: It was under the regular channels, then?

Nelson: Oh yes. The Park Commission was involved in it along with the Division of Beaches and Parks. I wouldn't want to go through another Squaw Valley, nor would they.

The Work of the Soil Conservation Division

Fry: What about the Soil Conservation Division? We might give a little more comprehensive rundown on that. I guess what is unclear to me is what its primary functions are. Primarily for reforestation or watershed.

Nelson: No. The Soil Conservation Division was created by legislation in 1955. We recruited Arthur Darsey, who had spent his career in the U.S. Soil Conservation Service, as our new chief of the Division. This is a very small division. To start with, I don't think we had more than eight or ten people in the organization. The main purpose was to work with the local landowners in the creation of soil conservation districts, and work with them in putting their programs together for better soil and water conservation practices. The U.S. Soil Conservation would then provide to these districts technical services to help develop farm plans, to make soil surveys, and to help engineer and design ponds and water supplies on their ranches.

Nelson: In 1957 Francis Lindsay got through a grant-in-aid program. This was the only real tangible program that the Division had. In this program we worked with the districts on drainage problems, on water development projects, on wildlife problems, and anything that would improve the soil and water conservation practices. Later we moved into the area of comprehensive planning within the districts. Some of these districts covered entire counties, and the comprehensive planning involved the development of an inventory of all resources--soils, water, timber, recreation, transportation, and so forth. Some of them have proven to be quite useful if the planning was done in cooperation with a cosponsor, such as a county board of supervisors or a county flood control district. In other words, any unit of local government could implement a program once the comprehensive study has been made.

The districts have practically no funds. They can charge a tax of two mills per $100 valuation of the land only, and not to the improvements or anything else--just the land itself. So they have a very minimum amount of money to work with. Some counties allocated a small budget to the districts rather than levy the tax.

It was about 1957 when we were getting a lot of surplus military equipment, and Assemblyman Francis Lindsay promoted a million dollar revolving fund, which was handled by the division. This equipment was made available to the ranchers through the soil conservation districts for doing special jobs, such as building reservoirs, leveling land, etc. They in turn would pay rental for its use. This carried on for some time and initially proved to be quite successful. But because the districts didn't have adequate staff and personnel to really ride herd on the program, it gradually faded out of existence. We still have a little carry-over from repayments coming in. We've repaid $400,000 of the million dollar initial appropriation [1966].

In the late fifties, Congress passed Public Law 566, which was a small watershed-flood prevention program. It authorized engineering teams in the U.S. Soil Conservation Service to work with local districts in designing projects within the limits of the authority for water conservation and flood protection. The program was later broadened to include recreation. We were able then to put together two engineering teams to supplement the federal teams in developing and designing projects. This has met with some opposition but quite a bit of support from many areas. The legislative analyst has opposed us on this and forced us to cut back our program a few years ago.

This year we were able to get four more people onto our survey team. We have a large backlog of requests for these projects that we haven't been able to meet. The state or the local entity must

(C O P Y)

214A

Save the Redwoods League

TREASURER: DR. ROBERT G. SPROUL :: UNIVERSITY OF CALIFORNIA :: BERKELEY 4, CALIFORNIA

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*Directors

OBJECTS

1. *To rescue* from destruction representative areas of our primeval forests.
2. *To co-operate* with the California State Park Commission, and other agencies, in establishing Redwood parks and other parks and reservations.
3. *To purchase* Redwood groves by private subscription.
4. *To co-operate* with the California State Highway Commission, and other agencies, in assuring the preservation of the trees and of the roadside beauty along highways in California.
5. *To support* reforestation and conservation of our forest areas.

March 28, 1961

Hon. DeWitt Nelson
Department of Natural Resources
State Office Building #1
Sacramento 14, California

My dear DeWitt:

At the time of the Bull Creek hearing Friday we did not have opportunity to discuss adequately Senator Charles Brown's bill (SB 960) which would give the Director of Natural Resources and the Commission authority to trade off state park properties.

This is a very dangerous bill and in my opinion would threaten the integrity of the Redwood and other parks, and would make them continually subject to political opportunism and the whims of individuals whenever there were pressures for commercial use of park resources. It would be difficult if not impossible to adjudicate fairly the relative value of lands involved. In the case of gift lands it might involve breach of a trust.

Section 5016 of the Public Resources Code, which SB 960 amends, was intended to meet a special situation in Anza Desert involving Federal lands. Would it not be safer to meet any such situations as they arise through specific legislation?

As ever,

Newton B. Drury

NBD:f

Copy to: Dr. Chaney (with copy of SB 960)
Mr. Starr "
Mr. Kent "
Mr. Leonard "
Mr. Brumsted "
Mr. Charles DeTurk "
Mr. Phelps Hunter "

Nelson: provide the cost of the land involved and the moving of public utilities, such as roads and power lines. But the actual construction cost when the projects are approved is borne by the federal government. This has been a good program, but it has moved too slowly because of inadequate staffing to design the projects.

California is difficult because most of the dam sites for controlling floods are in the lower reaches of mountain streams, and they generally involve larger structures than those that are required in Texas, Oklahoma, and the Midwest, where the program has gone forward rapidly. This program, with its limitations, is designed more for the midwestern problems than the problems we have. But we're moving ahead on it.

We now are doing some reorganization in the Division, in order to get better control and supervision of the grant-in-aid programs; and we've got some relief in our 566 engineering field. Chief Darsey retired this year and Bob Goodier, who was his chief engineer, is now the chief of the Division. Under Assemblywoman Pauline Davis's study, we hope to get the Division better equipped to meet our present-day problems in dealing with the impact of population pressures on our lands.

We are losing about 150,000 acres of prime agricultural land each year by urban expansion, industrial development, highways, and so forth. We need to move into a land use study--what, where, and how to preserve these valuable and productive lands. We have to move into a river basin study in order to work with the federal agencies, the Bureau of Reclamation, Corps of Engineers, Soil Conservation Service, and our Department of Water Resources in the development of major streams for water purposes, and at the same time develop means of protecting the upper watersheds. The 566 program is the only program that requires protective management practices of the resources on the watershed above the flood control structure.

Fry: Do you remember anything about the Bull Creek protection study? I thought this might do as sort of an example.

Nelson: Bull Creek is one of those popular examples of what should not be done. On the lower reaches of Bull Creek is situated the Rockefeller Redwood Grove, a magnificent grove of virgin redwoods. The upper reaches of Bull Creek drains some 18,000 acres, as I recall. It has for years been badly abused by burning for hunting purposes,

Nelson: incendiary fires, and by some rather severe logging in the early days. It also has a lot of natural slide areas; so geological erosion is also taking place. The upper reaches are very steep, while the lower reaches through the Rockefeller Grove are nearly flat; so you get a rush of water off the upper reaches. As the stream's gradient flattens out through the grove, the flood waters have a tendency to spread out and drop its load of sediment.

In December of 1955, we had a terrific flood. There was a sawmill situated above the Rockefeller Grove, and the owner had established a cold-deck of logs across Bull Creek. A cold-deck is a large pile of logs that sawmills bring in during the summer season to serve as their winter log supply when the weather does not permit logging. This company had placed their cold-deck across Bull Creek, but they had bridged the creek with logs to provide a sufficient waterway for a normal winter's rainfall. This is in a heavy rainfall belt. Well, about Christmas time in 1955, the floods came. Unprecedented floods. Debris came down from above and clogged the waterway under the cold-deck, which acted as a dam and built up a great body of water behind it. This finally broke loose and carried a tremendous volume of logs and trash and everything with it. Consequently, the flood waters did a lot of bank cutting in the Rockefeller Grove--widening the stream, cutting the bank--which brought down trees and deposited a great amount of debris and logs in the creek bed. It was a pretty sorry mess. We immediately went in and logged out all the usable material and sold it.

Fry: You mean the Division of Forestry?

Nelson: Forestry and Parks working together. Within a month--January 1956--we had another severe storm which caused more flooding in the north coast. Some additional damage was done in Bull Creek, but nothing like the December flood. There was over one hundred inches of rainfall in that area that rainfall year.

We had a conservation camp near there that we put right to work on the cleanup job. After we got the stream bed cleaned up, we started on the task of bank stabilization, using wire netting and rock (which is a French design known as a gabelon) for bank revetment purposes. This work went on for several years and proved to be very effective.

I was concerned about a repetition of another severe flood, so I asked our Division of Soil Conservation to see if we could develop a debris basin above the grove. They made a study, designed a dam and debris basin, and found it to be in the realm of feasibility. But our good friends in Beaches and Parks, and the Park Commission, and those who want no disturbance, felt that a debris basin above the grove would just be a man made device and should not be done. I contended that as this basin filled it could

Nelson: be planted. That it would level off heavy flows of water and trap the debris. Even after it became full, it would tend to slow the velocity so the stream wouldn't have so much cutting power through the grove. But they prevailed, and we were unable to get it accomplished.

In 1964, again at Christmas time, we had a worse storm and severe flooding throughout Northern California, Oregon, and Washington. Some damage was done in Bull Creek, but nothing like the flood of 1955 and '56. However, the devastation throughout the northern part of the state was one of the worst on record. When you measure the rainfall of four or five days by feet instead of inches, you have more water than the channels can carry and the ground can absorb, and you're going to have scouring, you're going to have mass soil movement, you're going to have erosion.

Some of the biggest mass movements of soil and trees was in our wilderness areas, where man had never disturbed a thing. Yet the popular conclusion of many was that logging was the cause of those floods. I guess my bias is showing. A very detailed study was conducted by the experiment station, the Division of Forestry, the Forest Service, and the Department of Water Resources, of the charges by many that logging caused most of the flood damage. Yes, logging contributed its share, but it wasn't the only cause. There was tremendous damage because streams had reached a crest that had never been reached. It took out sawmills; it took out great inventories of logs and sawn lumber supplies that had been piled way out of any known flood plain; it took homes and buildings of all kinds--bridges, highways, and what have you. It was really a devastating thing.

Fry: What was the difference between Bull Creek then and Bull Creek in the '55-'56 flood? Why didn't it cause quite as much destruction?

Nelson: Primarily because there wasn't the log deck across the stream that dammed up the water. When that dam broke, it carried all those logs out, which tore down everything in their path. The '64 flood did some cutting, took down some trees, and deposited some sediment on the redwood flood plains.

One needs to remember that the prime redwood groves are found only on the flood plains. Dr. Paul Zinke of the University [of California] made a very thorough study of this problem. He excavated a thirty-foot cross-section in the soil of the Bull Creek flat. As I recall, he was able to document by that excavation fifteen major floods in the period of the last thousand years.

Fry: In the root system?

Nelson: Yes. The redwoods have the ability to throw out another set of roots in the newly deposited layer of alluvium. Such deposits smother the roots and kill most other species of trees. Another reason for the long life span of the redwoods.

Fry: Would this argue against your catch basin that you wanted to build?

Nelson: Yes, it would. But I still believe that a catchment basin would trap much of the course gravel and let the fine sediments go on through. The trees do not do well with gravel deposits over their root system.

Following the '64 flood, the men in Beaches and Parks unearthed a down redwood which they had tested by carbon 14. It apparently had been buried by a flood some nine thousand years ago. So this country has a long history of floods, and we'll probably have some more.

Fry: They've never had a soil conservation department before.

Nelson: True. But even soil conservation, dam construction, and the best of resource management is quite powerless against Mother Nature when she makes up her mind to do something.

Fry: This gives you a real challenge.

Nelson: It certainly does. But these problems can be minimized. The engineers tell me that even if we build all the dams that are proposed, we could still have some devastating floods. However, as an example, the Feather River Dam near Oroville had just been topped off when the '64 flood occurred. Thank God it was, for it prevented much down stream damage.

Fry: This is the department you worked through, isn't it--the Soil Conservation Division--to prevent floods? Does it do anything at the time of floods, in the emergency itself?

Nelson: Yes, they're available. However, our flood fighting force is handled by the Forestry Division and its conservation camps. During the '64 floods, our forestry men and camp crews put in 60,000 man-hours just fighting floods.

Fry: And you found that the conservation camp inmates worked out just fine?

Nelson: If we hadn't had them, we would have had many times the loss that we suffered here in the valley. Rescue missions on the Eel River, flood fighting near Chico, and Woodland, and particularly down in the Delta--we would have lost Twitchell Island and one or two other

Nelson: islands if it had not been for the availability of those men to get in there to sandbag the levees. The beauty of those crews is that they are organized, trained, well conditioned, and well led.

Fry: Then, in building these dams, I was wondering if there is any problem of various assemblymen and senators wanting little ponds and recreational facilities in their home districts.

Nelson: No problem of wanting personal services. A number of them have seen supportive of the program where they have been the accomplishments of the work programs in their districts.

Fry: Oh, I see. But you haven't had a problem of this pork barrelitis again?

Nelson: No. There hasn't been the money available.

Division of Recreation

Fry: The Division of Recreation was under you for a while. And of course, the first question is how did it relate to the state parks when they were two separate divisions?

Nelson: The Division of Recreation was a small unit. It had less than a $200,000 budget, as I recall. It was created in about 1947 as an advisory unit to work with local levels of government in helping them meet their recreation needs.

Skip Wyman, who was the first director, concentrated practically all their efforts in working with the local levels of government on local recreation problems, primarily the playground type of programs. They never did get into the full concept of their statutory authorization, which included long-range planning.

When I became director, we had so many other problems before us, particularly in Beaches and Parks and the creation of the new Soil Conservation Division, and setting up and organizing the Small Craft Harbors Division, that I didn't pay much attention to the Division of Recreation. They did some very fine work in helping establish standards for recreation programs and local recreation developments. They held an annual conference which proved to be popular and helpful to local recreation organizations. Their contributions were many. One of the reasons they moved in this direction was that after the war we had the impact of many people, with insufficient facilities for desirable recreation programs, and there was an obvious need for this type of help at that time.

Fry: Primarily, then, in urban centers.

Nelson: Yes, in urban centers, and they made real contributions. In every general session of the legislature there was an effort made to eliminate it as a program unit of government; but every time the local levels of government came to their support and they were retained.

I think it was 1959. I saw the need for broadening their concept, and we went to the legislature and got some amendments to their basic law. They took on a little greater breadth of program after that.

Fry: In what way?

Nelson: In looking at the whole problem of recreation need. Since they had been holding hearings on such subjects as, "What can private ownership contribute to recreation needs?" they had some good data for planning purposes. I used them very heavily from '57 to 1960 in developing the California Public Outdoor Recreation Plan Report. There they played a very strong role and were able to give great help because they had the local contacts. Since the creation of the resource agency and the making of plans for the Parks and Recreation bond issue, they have been very helpful. While the Recreation Commission is still active, their activities have been somewhat absorbed by the Parks Department as a planning body. I think ultimately the Commission may be combined in some manner with the Parks Commission. It still is a small unit budgetarily.

Fry: They never did have land ownership?

Nelson: No, they were not an action program. They were an advisory unit.

Fry: Did you ever have any difficulty with some of the stronger metropolitan lobbies, like Los Angeles or San Francisco, in this?

Nelson: No, not in that area. At least I didn't; I don't recall any. Most of them came in and supported the retention of the Division when the legislative analyst tried to eliminate them.

Establishing the Division of Small Craft Harbors

Fry: In 1957, you had this new division put in, on small craft harbors. How did that statutory authorization work?

Nelson: Well, there had long been a movement through the State Chamber of Commerce to develop a series of harbors-of-refuge up and down the

Nelson: coast, where small craft, whether they were of the fishing fleets or recreation type craft, could get in case of emergency or in case of bad storms. The natural harbors-of-refuge along our coast are very far apart; very few of them provide adequate protection, particularly under southwest storm conditions. The State Chamber had been working on this for a long time. Finally, Senator Jack [John J., Jr.] Hollister, who was an avid recreation sailor, became interested, and he got a legislative committee interested in it. They got legislation authorizing a Division of Small Craft Harbors, which was placed in our Department of Natural Resources in 1957.

There was a chap, Horace G. Stevens, who was a lobbyist for a yachting association, who worked closely with Senator Hollister and the committee in developing the legislation. The legislation provided for the commission to appoint, with approval of the director, the chief of the Division. Steve Stevens was appointed.

Steve was the most likable and personable man one ever met. Everybody loved him, and he was a promoter of the first water. We had authority to employ a small staff and a revolving fund of several million dollars to be used in making long-term (twenty years) loans at low interest rates to legal entities such as cities, counties, and districts for the purpose of developing small craft harbors.

Before making such loans, we had to develop, in cooperation with the proponent, the engineering plans and design, and also make a feasibility study to determine whether such a loan would be reasonably safe and justified.

We had problems. Steve and the SCH Commission were anxious to get the show on the road, which led to promises which could not be met. Steve, bless him, was on the road most of the time promoting the program and himself. Most of his business was handled by word of mouth or phone. Consequently, we had very few records to work on. After all, we were responsible for handling public money in a responsible manner. In spite of these problems, we were making progress with a number of projects, some better than others. After some time, I discovered that Steve was falsifying his expense account; so we had to get rid of him.

Then we got Lachlan Richards as chief of the Division. He had been one of the clerks in the senate for a number of years and was a yachtsman in his own right, and a very sound individual. Locke is still chief of the Division [1966]. Here again, we ran into some publicity features. The San Francisco Chronicle didn't go along with the program. They put Jack Foisie, one of their top reporters, on our trail. Jack was--well, an interesting guy, and I enjoyed him personally.

Nelson: He told me, "I have a job to do, and the policy of our paper is to not be helpful. So all I can do is go around here and pick flaws in everything." He gave us some pretty rough water for a while. We made a loan to the City of Monterey for the development of a small craft harbor. Monterey Bay, of course, is subject to tidal action and sand movement, and we did have some sand deposit within the harbor. This is true of most any harbor; it has to be maintained and dredged. But because not quite all berths were committed at the time the harbor was completed, Jack tried to blast us out of the water. Well, our plan would have been very poor if every berth had been filled at the moment of completion. As it is, this has turned out to be a very successful harbor, and I think they are planning to enlarge it.

We had another instance on the Salton Sea. A land development promotion was made down there in developing a home and resort site on the west side of the Salton Sea. They formed a district in order to request a loan for a small craft harbor development on the sea. On checking this proposal, I found that it was a closed shop; that by far the majority of the voters and residents in the district were employees of the developer. It looked to me like a paper district and an unwarranted project. I recommended to the Commission that the loan be denied.

Well, they approved it, for they had pretty well promised that they would support the loan. When it came through for my final approval, I denied it, and the loan never was made. They did not fight my decision, but finally went ahead on their own. It has been a good program. But like all programs dealing with cheap money or grants-in-aid, you're dealing with a very sensitive and delicate problem. It's an easy place to trip yourself up.

Fry: Are these all supposed to be harbors of refuge?

Nelson: Not necessarily; harbors of refuge and for recreational purposes. The law has been amended to provide grant-in-aid for launching ramps and boating facilities on inland waters. It's pretty well stabilized now, after the initial growing pains. Policies and procedures have now been developed so the Division, the Commission, and the applicants know how to proceed and what to expect. They also understand their responsibilities and obligations of being careful in the allocation of public funds.

Fry: Were you pretty well vindicated after the Chronicle articles?

Nelson: Oh yes, that all worked out very well. The Monterey Harbor proved to be very successful, and that was Jack Foisie's main target.

Fry: Any others, or was this just for a period of time?

Nelson: We had a bad one on Mono Lake that didn't work out. Probably the worst one was at Martinez, which is located in the straits above the Carquinez Bridge. These are difficult waters because of the large load of silt constantly being transported through the straits.

Our feasibility study was not promising because of the obvious dredging maintenance cost. Senator George Miller of Martinez was very supportive and insistent for the project. I have to admit that we acquiesced to his urging and finally approve the project. In short, it was a dog because of the silt deposits. The senator did not pass the buck. He publicly shared the responsibility before a subsequent meeting of the Senate Finance Committee.*

We had good projects, such as Santa Cruz, San Leandro, Ventura, Oceanside, Monterey, and Eagle Lake, to mention a few. In the 1961 reorganization the Division was placed in the new Department of Parks and Recreation.

The Division of Mines and Geology

Fry: Tell me about the Division of Mines and Geology. Is its main purpose the gathering of information, map making, mineral studies, and research?

Nelson: That's right. The Division of Mines and Geology is one of the oldest divisions in state government. It was created as the Bureau of Mines way back in the 1860s when gold and minerals were helping build California. Their law limited them to the study and mapping of the geology and mineral aspects of the state. Of course, as the state grew in population, the need for other geologic values and knowledge became apparent. So they have moved away from the limited area of mines and mining geology. They have studied the earthquake faults for many, many years. They have made the most comprehensive reports on the earthquakes, like Long Beach, Santa Barbara, and Bakersfield. In recent years, we've moved into the geothermal area, which is a new field and one that can become more and more important as the need for energy grows.

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*A check in 1975 disclosed that the silting problem has been controlled, and there are plans for expanding the facilities at Martinez.

Nelson: A few years ago we entered into a cooperative agreement with the County of Los Angeles for making geologic hazard surveys on a large scale in the mountain areas that are subject to development for homes, industries, and so on. The county uses this information in their zoning program. In hazardous areas they either deny the construction of buildings or require certain standards of building or certain types of building to withstand slide areas or meet earthquake requirements.

Fry: Is this only in that county?

Nelson: No. We are now working on a similar project with San Diego County, and we've done some work in Orange County. This is an area of work that needs to be expanded. We're moving now into this direction and in the study of earthquake faults because homes and industries are going into these hazardous areas of fault zones and potential landslide areas. So this is a rather new venture in recent years.

I should mention that Senator Randolph Collier got us a million dollars in 1959 to improve our laboratory facilities, and authorized our employing a geophysicist and geochemist on our staff. We have been trying for years to get a paleontologist, but for some reason the Department of Finance and legislative analyst just won't go with us on a paleontologist. We keep working at it.

In 1965 we were able to get legislation which broadened our area of activities and changed the name from Division of Mines to Division of Mines and Geology. We didn't get everything we needed or wanted primarily because our sister department, Water Resources, which also has a geologic arm in their department, was trying to expand their authorities and activities in the broad geologic field instead of staying in the project field where they belong. This is an issue that is now under debate, and I think there will be some organizational change in not too long a time.

In '65 we got legislation through under the Division of Oil and Gas statutes, which involved the Division of Mines and Geology, in the geothermal field. This provides for regulatory measures in the development of geothermal resources, comparable to the regulatory controls that we have in the development of oil and gas. The chief of the Division of Mines and Geology, the director of the Department of Conservation, and the chief of the Division of Oil and Gas constitute a geothermal board under this legislation.

Fry: This includes geothermal steam?

Nelson: Yes. California is the only state in the nation that has harnessed geothermal steam for power generation purposes. That's done by Pacific Gas and Electric Company in the area known as the geysers.

Nelson: Our division was helpful in getting PG&E interested in this. Since then, there's been quite a bit of prospecting and lots of money spent in geothermal exploration and development in the Salton Sea area in Imperial County, in the Casa Diablo area in Mono County, and in the Clear Lake area of Lake County. There are other possibilities in California. During the 1966 legislature, we tried to get some additional legislation enacted in this field. But one oil company, who had some hidden agenda that we couldn't identify, killed the whole thing with the legislative committee.

Fry: I think--this was concerning the Salton Sea deposits, wasn't it?

Nelson: No, it was up here in the geysers area. It was the Signal Oil Company that was successful in killing the proposed legislation. There's an interim committee now supposed to be studying this.

Fry: This was legislation which would enable a company to have the mineral rights to more than whatever the acreage limit is?

Nelson: Yes. You see, under the Division of Lands, which body handles all mineral leases, the present law is geared to hard minerals. Metalics and nonmetalics, such as gold, iron, copper, sand, and gravel. Petroleum and geothermal minerals aren't as well confined as are the hard minerals. Nobody knows yet how these move from one place to another. So, in order to protect the investment of a given company, they need a larger area, at least to start with, for prospecting purposes. After that, it could be narrowed down. Our legislation was drafted along the same lines as federal legislation, which is under consideration. But this one company was able to block it. I never was able to find out why.

Fry: As I understand it from my interview with Schofield, it was because the company which Schofield represented was about to get the rights to this, and I guess they were competing with the oil company.

Nelson: There was a competitive factor in there some way or other.

Identification of Hazardous Real Estate Areas

Fry: I was going to ask you if you received any objections from any of the developers and the builders in this state on your land classifications of hazardous areas.

Nelson: We haven't had any serious objection, no. We ran into one problem up at Shelter Cove. You see, all subdivisions of a certain size or more (I believe it's five acres) have to clear through the

Nelson: Real Estate Division. We found that when Shelter Cove was being promoted, they hadn't really identified the potential earthquake hazard to persons who were buying lots up there. So we took it up with the Real Estate Board and pointed out that this is where the San Andreas Fault goes out to sea, and houses being built there were sitting right on top of the San Andreas Fault. In fact, there is evidence of past slips and serious land movement due to the 1906 San Francisco earthquake. After considerable debate, the Real Estate Division brought this to the attention of the developer. He accepted the fact that he had to identify this risk to his people.

We have had other areas where serious debate has been raised between consulting geologists and public geologists, both in the Division of Mines and Geology and in the U.S. Geological Survey. For example, in the mud flat fill area of San Francisco Bay, if you put large heavy improvements on some of those filled areas or unconsolidated mud flats, they could be subject to complete loss, just like the Alaska earthquake of a year or two ago. So it's not always accepted with happiness because it does impinge on the individual's development of the land as he would like to develop it.

Fry: Do you have any way to force a developer to stop developing on hazardous areas?

Nelson: We have none, no. That would have to go through the Real Estate Division and the local jurisdiction. So, at the present time, the best we can do is identify the hazardous areas. We now have a procedure we are following with the Real Estate Division where we give them what information we have on all their applications for subdivisions.

Fry: I was wondering about the maps. How do you coordinate maps that come out of Mines and Geology with other map making that goes on in your department?

Nelson: Well, we use each other's basic information, and Mines and Geology furnish their information to other public agencies and vice versa. It's an area of coordination that needs to be improved. We work very closely with the U.S. Geological Survey. In fact, we have a $30,000 budget item in which we augment their funds in geologic surveys in certain areas. By pooling our resources, we get benefit (we think about three to one on product received) as they put in much more money than we are able to put in.

We also have a small cooperative research fund that we work with the Bureau of Mines in various activities. The Division of Mines and Geology discovered and promoted the great asbestos ore body in the area that straddles the line between San Benito, Monterey, and Fresno

Nelson: Counties. It resulted in a good many million dollars of development in asbestos, making California the prime asbestos producer of the nation today. Canada had practically all this market tied up before. This is a very recent development.

Fry: This has been since you became director?

Nelson: Oh yes, this has been in the last three or four years. But I can take no personal credit for it.

The Division's scientists have discovered ten or twelve unknown minerals heretofore that exist here in California. We don't know what they're good for at this time, but there was a time when nobody knew what uranium was good for. One of the recent discoveries was a rather large body of jade in Mariposa County. So there's lots of minerals in California that we don't know where it is and we don't know what some of it is.

Fry: And this is all run out, then, for public information?

Nelson: Oh yes, it's all widely disseminated. It's all public information. Reports are made on it. The Division is a fact-gathering and disseminating body. We have one of the country's best mineral libraries at our office in San Francisco, and a beautiful mineral exhibit down there.

Fry: Is most of your staff on this in San Francisco?

Nelson: Yes. We have one small office (two men and a stenographer) here in Sacramento; we have a two-man staff and a steno in Redding; and then we have a pretty complete staff in Los Angeles (because there's lots of work in Southern California). It's a relatively small division; only has about a million dollar annual budget.

Fry: I'm not sure whether we made clear a while ago whether your work in hazardous areas in Los Angeles was for earthquake faults or slippage of watershed lands.

Nelson: Both. It involves three things: earthquake faults, potential landslide, and rockfall areas. We are doing a lot of work in the sand and gravel field. This is one of the nonmetallic minerals, or industrial minerals, used to build our cities, highways, airports, and what have you. In the metropolitan areas, urban sprawl is covering up this resource. We have been working in recent years in identifying where these are and their quality, and we are trying to get the local government to zone these areas against development. Every mile that you have to reach out to haul this heavy sand rock and gravel product to a project increases the cost tremendously. It is estimated that at the present rate, in 1973 Los Angeles will have exhausted their ready supply, and they'll

Nelson: probably have to reach clear into the Cajon Pass area. That will increase the cost of this commodity by about 350 percent, which is a very, very large item.

In Southern California, many of these gravel quarries and pits, after they have been exhausted of their minerals, are then used for back fill waste disposal sites and later developed into golf courses, subdivisions, shopping centers, etc. So you can have your cake and eat it too if you plan and develop wisely.

Fry: You took that question right out of my mouth! I was going to say, here you are the director of an agency that has these competing interests that you're always having to find some equitable solution to, and this is a good example. Urban planners don't usually like to see the excavations for gravel pits.

Nelson: No, they're looking for beauty, and people living around them don't like them because of the noise and the dust. But the industry is developing methods of controlling the dust and suppressing the noise, such as screening the quarries with plantings of one kind and another. These are developments that are taking place because of the pressures.

Fry: Have you ever felt in this job that you really are being pulled in three or four ways at once?

Nelson: That's been the core of this job. I guess that's been the part I've enjoyed because I've spent my life trying to bring opposing poles together.

The Division of Gas and Oil

Fry: We were just talking about the Oil and Gas Division. It seems to me that your parks, for instance, conflicted with some of the major oil interests when they didn't want the offshore drilling by parks.

Nelson: Yes. There is an economic versus esthetic conflict. Of course, oil is an important mineral resource in California. The production value of oil, gas, and minerals, both hard and industrial minerals, amounts to about $1.5 billion per year. That is a big item economically. It means thousands of jobs and it means a great deal of tax revenue. Of this $1.5 billion production value, about a billion comes from oil and gas and the balance from other minerals. This is not revenue to the state; this is the value of the raw product produced before it is processed.

Nelson: In the oil and gas field, our Division of Oil and Gas is strictly a regulatory body. It is a special-fund body that is supported by a levy against the production of all oil and gas wells. Under the law, we bond and inspect all drilling activities, all shutoffs, and all abandonments to see that they will protect the underground waters from pollution by oil and gas seepage. Or vice versa, that the oil and gas resource is protected from water intrusion. It is strictly a regulatory body, and it has worked surprisingly well.

There have been attempts made to unitize all oil and gas production. This means balancing the production from all wells in a given field in order to get maximum recovery of the resource. But here again, we run into the ownership problem, where the ownership is in many, many parcels. There have been three attempts through constitutional amendment or referendum, to provide for the unitization of oil and gas fields. Every attempt has failed. The lobby of the industry has been strong enough to kill it. The last time was in the fifties, when Richfield Oil and several of the companies banded together to try and accomplish it. But some of the other majors were strong enough to kill it.

However, there are provisions for voluntary unitization, and this is moving forward. There've been a lot of technological developments whereby the companies are increasing their recovery tremendously by water injection, by steam injection, or by burning. This forces the oil to the well; the recovery, instead of being what may be a normal recovery of the resource--say around 20 to 30 percent--is now being increased to as high as 50 percent, and some are claiming that they will eventually get as high as 70 or 75 percent of the resource. It is a technological development and one that is resulting in much greater recovery and utilization.

In the Long Beach-Wilmington area, there was very serious land subsidence due to the extraction of the oil and gas from this very productive field. In some areas, the land surface was dropping at the rate of about a foot a year. At the center or bottom of the basin, it had dropped twenty-five or thirty feet. Finally legislation was designed that called for unitization and water injection into the field. The administration and responsibility for accomplishing this was placed in the Division of Oil and Gas. The industry, at their cost, is injecting some five to six hundred thousand barrels of water a day into this area, and the production is unitized. The subsidence has been checked. This has resulted in greatly increased production, rather than declining production, which it was before. They are getting recoveries now 50 percent greater than before. It's a live field rather than a dying field. It's working out very satisfactorily.

Fry: And that was the main factor involved?

Nelson: Yes.

Fry: Now, this legislation enables you to insist on this all over the state?

Nelson: Oh no! Only in that area.

Fry: Only in that area?

Nelson: Yes, it's limited to that area. The industry is voluntarily unitizing fields where ownerships will permit and where possible ownerships are being consolidated. As some fields begin to dwindle in production and the owners see that the life expectancy is limited, they do get together on steam injection or water injection and bring the fields back to active production. The industry is finding some new fields and extending others, but they haven't hit any new bonanzas. Just this year, through the lease in the Los Angeles harbor, a number of islands are being built; in the next few years there will be perhaps a thousand wells drilled. Our greatest expansion of production can be from offshore leases on both state and federal areas. This will greatly increase the production of our petroleum resource.

Fry: You speak with a lot of authority on this. How did you get yourself educated when you as a forester took over such things as oil and gas and mining?

Nelson: Well, of course, I had a lot to learn. When one works for thirteen years with scientists like Dr. Olaf Jenkins, Dr. Ian Campbell, and Dr. Gordon Oakeshott, chiefs of the Division of Mines and Geology, and professional oil and gas engineers like Ed Musser and Gene Murray-Aaron, something was bound to rub off onto me.

Fry: Did you go out in the field to get acquainted?

Nelson: Some. I haven't been able to as much as I would like, but I've worked with the chiefs and men in the divisions. You just have to catch up.

Fry: Are we ready to proceed, then? Can I assume that we have covered most of the things that you also handled as director of the Department of Conservation in 1961, which included four divisions of forestry?

Nelson: Yes, I think we've covered it fairly well.

Fry: Mines and Geology, Oil and Gas, and Soil Conservation.

DeWitt Nelson, Director, Department of Conservation (1965)

Nelson: And we covered the recreation study. I don't know whether we covered something on the Delta Sacramento River study, which I chaired. I think we've just about covered the field.

Relations With the Fourth Estate

Fry: In your many years of public service, how did you get along with the press and other news media?

Nelson: I think, while I'm on this subject, here and there throughout this interview I've pointed out some of my reactions to the press. And here I can be unfair too, just as other people are unfair in their appraisals. I have found the press (what we call the fourth estate) around here to be extremely cooperative in many, many ways. I've not been one to make a lot of news copy; I'm just not built that way. But when I needed the press in many of our issues, I'd go to them and they were most helpful. The press, the radio, and the TV all have been most helpful. They haven't always reported as I would like them to report; they have been extremely helpful many, many times, and I have enjoyed working with them. They had a job to do and I had one to do; I didn't always like what they did, and I imagine they didn't always like what I did.

Fry: It might be helpful here to future researchers who will be using this material along with the newspapers to know which newspapers you thought were most cooperative, if you could give some evaluation of them.

Nelson: The Sacramento Bee has been extremely cooperative. There were no newspapers that really pursued me. Henry McArthur of the Capitol Press was always picking on Newton Drury, but Henry and I got along fine. But I had my moments.

For example, earlier I mentioned a situation in Lake County when I had to force an old-time ranger to retire. For weeks every issue of the Middletown paper worked me over. Someplace along the line I had learned not to get into a running battle with a newspaper--you can't win; they always get the last word.

One of the Sacramento Bee reporters took issue with me for holding a "closed meeting" with the Small Craft Harbors Commission when we called for Stevens's resignation. In this case the attorney general supported me, since personnel matters can and are handled in closed sessions within the provisions of the Brown Act.

I have previously told about Jack Foisie and the Monterey Small Craft Harbor.

Nelson: I had another case which made a mountain out of a molehill. Now as I look back on it, it becomes laughable. We were ten years ahead of our time. Part I of the California Public Outdoor Recreation Plan came off the press in early June of 1960. On August 11, I attended a joint meeting of the Assembly Natural Resources Committee and the Assembly Ways and Means Committee. A San Francisco Chronicle reporter made an issue of a photo on page 12 of a young couple kissing on a park bench. The picture was one of eight under the title, "Who Needs Outdoor Recreation." On the other hand, pages 11 and 12 carried a series of pictures showing different kinds of outdoor recreation, and in the center was a group of nuns dressed in their habits sitting around a picnic table. Everyone was enthusiastic about that picture.

The Outdoor Recreation Plan was published in two parts, and it happened to be the first state report to use color. In the last part of August, I was called before the Assembly Subcommittee on Printing and really worked over for using color in a number of charts and graphs.

I am sure there are others, but none that had any lasting effects. Besides, I never let situations like that bother me for long; there is too much to do, and those situations can't be undone. The main thing is, don't let it happen again.

Fry: Are those all of our problems with the news media?

Nelson: Oh, there are one or two things I should mention. Walt Radke, outdoor writer for the Chronicle, would periodically tear into the Forest Practice Act for stream damage on the north coast. His criticisms were usually justified. But when we tried to strengthen the enforcement teeth of the act, none of the sportsmen or conservationists were there. I guess they had all gone fishing.

In recent years, Governor Brown [Edmund G. "Pat"] has taken a four- or five-day pack trip into the back country with representatives of the Department of Fish and Game, Forestry, and members of the press. This gave us all a chance to get better acquainted and to discuss many problems and their possible solutions.

James Guthrie, publisher and editor of the San Bernardino Sun, strengthened my sensitivity for esthetics in his constant efforts to get the Division of Highways to reduce the highway scars on the front side of the San Bernardino Mountains. That was while I was supervisor of the San Bernardino National Forest. James Guthrie, Jr., who succeeded him as publisher, served as master of ceremonies at my retirement party.

Fry: Do you have a public relations person on your staff to send out information?

Nelson: No. We are one of few departments in state government dealing with vital things that does not have a trained journalist or a public information officer. I have tried to get one, but for some reason or other we have not been able to get it in the budget. We make use of homemade talent.

Fry: Why is this?

Nelson: Well, I just haven't been able to figure it out. I guess the Department of Finance and the legislative analyst figures that we are getting along without one, so carry on. It is like the time when Hannibal was having difficulty in taking Rome. He sent a request to the senators at Carthage for reinforcements. They replied, "If you are winning, you don't need help, and if you are losing, you don't deserve any."

Fry: That argument alone shows that you do need some press relations.

Nelson: And I've used that argument before committees. But all it gets is a hearty laugh.

Fry: I gather that you have been able to call in and hold your press conferences when something really brews up, and that this is the way you've handled it.

Nelson: I've never been one to call press conferences. I think I've missed some opportunities there. I just haven't been inclined in that direction. Of course, my present deputy director, Robert Calkins, is an old newspaperman, and he has been very helpful in this regard.

Fry: You haven't really had a chance, then, to make public rebuttal to some of these controversies.

Nelson: No, I haven't, and I haven't seen much success come from a lot of those public rebuttals, either. I sometimes question the value of them. All it does is widen the breach and throw more coal on the fire. I've tried to handle them on more of a personal basis.

Fry: Working more directly with the people who initially made the charges.

Nelson: That's right.

BROWN'S RESOURCE AGENCY CONCEPTS

Fry: I would like to make a little mention about the resource agency concept. This was one of Governor Brown's concepts. There had been no major reorganization in state government since 1927, and in 1927, the Department of Natural Resources was created.

Nelson: One of Governor Brown's platforms was a reorganization platform. In 1959, he put together a task force to study the problems and to come up with recommendations. The task force recommended that eight agencies be created, each bringing under its respective canopy the departments that were allied or related, one being the resources agency. The legislature approved the creation of four of them. They are the resources agency, corrections, transportation, and welfare.

This legislation passed in 1961 for the four agencies, and then the governor brought together the other four in a loosely-knit unit organization by administrative order. This, of course, was a highly debatable issue, and I was not happy about losing the three recreation units from our Department of Natural Resources. But as it developed, I'm delighted that they were made an independent department, because it is a tremendous area of program and activity and responsibility, and one man just can't cover all of these elements adequately.

When the agency was first developed, William Warren, now director of the Department of Water Resources, was designated as acting administrator of the Resources Agency. Bill did a good job at bringing all of our departments and units together in a more cohesive manner. We got better acquainted and started to work together on some problems of common interest. It must have been about 1962 when Hugo Fisher was appointed administrator . Hugo had been a state senator from San Diego, and he'd lost his second run for that post. The governor appointed him administrator for the Resources Agency.

Fry: This sounds like there was some political obligation there, perhaps.

Nelson: There may have been; I don't know. Hugo came here as an ex-senator and as an attorney. He had no specific experience in the resources field, and he had no administrative experience. He is an unusual man with tremendous capacity for work. I think he has done a terrific job in making the Resources Agency a rather dynamic unit of government.

Hugo, in many areas, is a controversial figure. He is politically-oriented, he is very liberal, and yet he has accepted my philosophy as pertains to the private land resources more than most any other man I have known. It's somewhat diametrically opposed to his own natural concept. But we have found an area of compatibility, and he has relied on my judgment in many things. He has gone with me far more than I had ever expected him to. On the other hand, I have supported him in a number of instances. I think he has done a terrific job in this area, considering his background.

Fry: By his natural concept, you mean his own personal concept?

Nelson: He's a liberally-minded person. He's a true Democrat, but he's not a way-over Democrat. I have more of a liberal Republicanism concept. He has maybe a semiconservative Democratic concept. If there is such a thing.

Fry: Sounds like you're pretty close. Well, you'd think that personally he might favor more government control of some of the resources, but operationally he sees that your viewpoint is the one that works, is that it?

Nelson: Well, I think he sees that--how shall I state it?--he is inclined for more regulatory measures than I. I am inclined to go more slowly and try to lead people into accepting their responsibilities. Maybe my method is too slow, under our present rate of growth; it might well be. Then, on the other hand, if we move too rapidly into a position of rigid regulation, it can have damaging effects too. I've tried to compromise this concept.

Fry: I guess--well, Fisher hasn't been in very long. I was wondering if you'd like to give an example of what you meant, in which Fisher has supported you.

Nelson: For example, at the Z'berg hearings in Berkeley last week, Mr. Fisher's presentation was not too greatly different from mine. He did go a little further in some recommendations that he and I had discussed and agreed upon. But we felt it was his position to make them, as administrator, and not mine, as director. That's been, in large part, the way we have worked together. He started out with a much stronger proposal for a redwood national park than he now holds, and I think I had some influence on that.

Fry: How do you mean "stronger"?

Nelson: He was originally inclined to go with the Sierra Club concept. I spent considerable time going over with him the economic aspects--what it means to the counties, the communities, and the people that are dependent on the resources, and the nature of the resource itself. You just can't bottle it all up. After all, much of that area is over-mature and decadent. You fly over it today and it's full of spike-top trees. They'll last for quite a while; yes, redwood will last longer than others will when they reach that age. But one of these days they're going to go. Some of them are going every year. So we've been able to work out an area of pretty good compatibiliy.

WORKING WITH CALIFORNIA GOVERNORS

Fry: What about comparing Governors Knight and Brown in their support of your administration?

Nelson: I have mentioned that Governor Warren, through the State Board of Forestry, gave great impetus to that program. Governor Knight carried on but didn't initiate many new programs. He worked with us very closely in some mining and mineral work particularly, trying to get a national mineral policy created. But the national government did not accept it. He was personally interested in gold mining.

We developed in 1955 a conference of the western governors and mining interests here. For a three-day conference, we had six of the western governors and some five hundred people here. After a great deal of preliminary work with committees from all over the West, we put together a document of recommendations for a national mineral policy. But the federal government has not seen fit to buy any of it yet. They are now beginning to move in a direction of accepting some of the principles as far as gold mining is concerned. I'm not very optimistic about that at the moment.

Fry: Excuse me, Swede. This was about when some of the mining legislation was passed, as I remember, that would severely cut back on the rights which miners could have on public land.

Nelson: This followed that, yes.

Fry: Was this mining conference pertaining to that?

Nelson: No. It was geared largely toward reactivation of the gold mining industry by increasing the value of gold, or subsidizing the value of gold. We were trying to establish a mineral policy that would protect our domestic metal mines from being destroyed by the import of foreign minerals from low labor cost mines and things of that nature.

Nelson: Generally speaking, Governor Knight did not initiate many programs. He was a grand guy to work with, though; he was a wonderful personality--delightful. I remember one of his favorite sayings: Today's peacock is tomorrow's feather duster.

Governor Brown, on the other hand, has been a man who has initiated programs. I should qualify my statement about Governor Knight, for he worked hard and diligently to put over the Feather River Water Project, and what he did, I am sure, contributed to the success of the vote of approval by the people during Governor Brown's term. It all adds up. These things are cumulative. You can hardly credit any one man with any one thing because so many things in government and public business move so slowly that an accumulative force builds up. The work that Governor Knight had done helped put it over for Governor Brown.

Governor Brown has initiated new programs. Within the first month of becoming governor, he called a meeting of all forest protection agencies to see what could be done to get on top of the forest fire problem. This was shortly after the Bel Air fire in Los Angeles which destroyed so many beautiful homes. From that one meeting, Governor Brown initiated a program to double the number of conservation camps. As a result, we have added several new camps each year. This is a cooperative program between the Division of Forestry, the Department of Corrections, and the Department of Youth Authority. He was strong for the park bond issue program. Of course, his drive in the statewide water development program has been terrific. Then, of course, there have been many programs outside of our jurisdiction that I'm not qualified to comment on. Many programs develop from pressures and demands for education, health, and welfare, etc. Whether we agree with them or not, they've come about. I think Governor Brown has been a good governor. He has really worked at his job. I've enjoyed working with him.

Fry: I was going to ask you if he had been very difficult to work with. He was accused of being wishy-washy.

Nelson: I know he has, but I haven't personally seen any of that. He supported me in most all cases. He hasn't always gone as far as I would like, but the main reason he hasn't was because of the lack of money.

Fry: What about in forest practices? Has Brown ever had to take a stand on anything?

Nelson: He's very concerned with this program and the attitudes that are being generated, particularly as a result of the north coast problem. However, he has made no public issue of it.

Fry: Did you have closer contact with Knight than with Brown?

Nelson: My relationship with all three governors has been cordial. I don't know as I could say that I've had intimate contact with any of them. Because of the magnitude of the governor's job, very few people have; his demands and pressures are so great. Much of our work is through staff. We have to rely greatly on their staff. That's one thing that has helped through the agency concept, as the agency administrators constitute the governor's cabinet. It provides much better liaison between the operating departments and the executive arm of government.

Fry: What do you think about the cabinet level appointees of Knight and those of Brown?

Nelson: Of course, Knight didn't have a cabinet as such. He had the counsel, which was made up of department directors. We still have the counsel, but the real decisions are made within the cabinet.

Fry: Did Knight appoint any of these, or did he just inherit and keep? I haven't followed this, so I don't know.

Nelson: You mean the directors? He made some changes, yes. And over his term of 5 1/4 years as governor, he made a number of changes. Some changes just took place, as they always do. I've enjoyed working with every one of them.

Fry: You don't have any great complaints, then, of the appointees of either governor in running the business of the government?

Nelson: No. In most instances, Governors Warren, Knight, and Brown have recognized and appointed career men, many of them from the civil service ranks. This has been particularly true in the resources field. My position has been with each of the governors that there is no place for partisan politics in resources. What's good for one is good for the other. After all, our object is serving the people, not partisan politics.

Fry: Has this appeared to be their viewpoint too?

Nelson: Well, they generally have agreed with me, as far as I have been concerned. I have not been pulled into much partisan politics. I have avoided it, and they have let me avoid it.

Fry: There is another resource agency on the federal government level that does influence campaigns from time to time, and I was wondering if there was any of that at the state level.

Nelson: Which unit were you thinking of--federal level--Interior?

Fry: The Forest Service really gets in and slugs it out once in a while on the local level.

Nelson: Once in a while, when it comes to some of the resource issues.

Fry: Primarily on issues rather than on men.

Nelson: Issues, yes. It's not on partisanship; it's on issues. Primarily. Of course, the issues may be drawn on partisan lines, but they try to hold to the facts of the situation, rather than to the partisan aspects of it.

Fry: I was wondering if any issue has developed to such a wide interest here--a state issue--that men in the field have come out to support.

Nelson: Generally speaking, no. We've had some problems between us and Fish and Game. I have endeavored to try to work these out internally. Some of their rank and file have jumped over the traces, and we've had some pretty sharp words.

Fry: Out in the field, you mean?

Nelson: Mostly right here in headquarters office. Our field men get along, generally, as a rule. That's usually the case.

Fry: Yes. It was the case between Interior and the Forest Service. Has this been primarily concerned with regulations?

Nelson: Yes. They claim we haven't done our job, and I claim they haven't done their job any better or as well as we've done ours. Some of their men have, in my judgment, gone beyond their area of fair play ethics and everything else in what they have done in these areas. This last article by Alex Calhoun in the Sierra Club magazine being a prize example. His department director didn't even know anything about it.

Fry: This is kind of an automatic pipeline, I guess, for some of their problems.

Nelson: What he does is stimulating an emotional upheaval, and he's building the opposition of the industry stronger against cooperative relationships. They haven't tried to work with the industry as I think they should. And, incidentally, Administrator Hugo Fisher has gone with me on this too.

I would like to state, while we're talking about the governors, I think one of the greatest thrills I've had is when former Governor Earl Warren (now chief justice), former Governor Knight, and

Nelson: Governor Brown all appeared at my testimonial dinner last Friday night [August 19, 1966], which was certainly a climax to my forty-one years of public service. There were several hundred people from many walks of life and from all parts of the state there. It was a thrilling occasion.

Fry: It must have been quite a dinner. I thought we would put the newspaper account of it in the manuscript. Do you have anything else to add?

Nelson: I think it would be very good. It would be very nice to include the story. I think that about covers it. What do we do now--go to extra activities?

Fry: I have extra activities down here. Especially the Outdoor Recreation Resources Review Commission, which you have mentioned earlier.

Nelson: Well, I think we can go a little bit further than that, yes.

PROFESSIONAL ASSOCIATIONS

SAF President: Issues

Nelson: While I was state forester, I was president of the Association of State Foresters in 1951. Then in 1956-1957, I was president of the Society of American Foresters. This gave me nationwide contacts and association with professional foresters and their problems. I was able to do quite a bit of traveling over the country--meeting with them, reviewing their problems and solutions firsthand. Throughout this whole period, I tried to inject into the professional forester the need for really professionalizing himself and becoming more articulate. I think that's one of the great handicaps of the forestry profession; too many of them started out as the great silent men of the woods, and they have stayed silent ever since. Too few of them have been articulate or willing to articulate what they are doing, either publicly or in their professional magazine. Some way or other, we've got to get these guys off dead center.

Prior to becoming president of the Society, I was a member of the Council for Eight and vice-president for two years. Here I came in contact with many of the fine professional leaders throughout the country.

Fry: Now, as the Society of American Foresters' president, were you concerned at that time on any lack of consensus on whether SAF should take a stand on public questions?

Nelson: Yes, I have always felt that we should take a stand on public issues involving the forest resources. Consequently, I have often felt like a lone voice in the wilderness. However, this attitude is gradually changing.

The Society's failure to take a stand on issues was primarily due to the different points of view that our membership held because of their employment factor. We have the educators from the schools of forestry, the foresters in private employment, the

Nelson: foresters in federal employment, and the foresters in state employment. So we wind up with about four different points of view on many issues. My contention is, and has been, that on many issues, if we really look at the issues as professionals, we should ignore our employment relationship. But this doesn't work out in practice very well because men's professional points of view are often warped--no, warped isn't a good word--maybe oriented is better. Anyway, their points of view are influenced by their associations; so they interpret issues differently. I find this is not uncommon; it occurs in other professions also.

Fry: They're all sincere, then.

Nelson: Oh yes, they're all sincere. Very sincere in their beliefs and concepts. I think any profession--the legal, the medical, the engineering or what have you--have these differences. If they didn't, it probably wouldn't be a healthy situation.

Fry: Are you saying that issues--views on issues--are usually split along employment lines?

Nelson: To a large extent, yes.

Fry: And then, in addition to that, there's this rather strong consensus that there should be no consensus?

Nelson: No, I don't think that is true. Whatever it is, it is in the process of change right now. I think the reason for it is that the so-called preservationists are so well organized and so articulate in expressing their points of view that the inarticulate foresters are finally having to band together in a defensive move. It is unfortunate that it's defensive and not more constructively offensive.

Forestry, like many other professional groups, is not a homogeneous body. While we all have a common base, there are many specialists. As a result, we serve a variety of interest groups. We have two major publications--the monthly Journal of Forestry and the quarterly Forest Science. When I became president, we had just finished a long-term project of developing and publishing The Forest Handbook and were working on developing a "forest terminology." At that time we had nineteen geographical sections which were further divided into chapters. By this type of organization, everyone has an opportunity to participate. We also had working divisions in such subjects as forest recreation, silviculture, range management, education, private forestry, watershed management, economics and policy, forest products, etc.

Nelson: I published a "President's Column" in each issue of the journal which dealt with current matters. If I were to identify a theme for my columns, I guess it would be the development of professionalism throughout the membership.

We had one unhappy incident which came to light while we were holdling our annual meeting in Memphis, Tennessee, October 15 and 16, 1956. That was a presidential election year. Stevenson-Kefauver were running against Eisenhower-Nixon. Naturally, the membership was divided in their support of candidates. Many members were actively engaged in supporting their favorite, which was certainly their right and privilege. Unfortunately, two members--one of whom was a past president of the Society--had requested permission to run a political advertisement in the journal. This was diametrically opposed to our code of ethics and the nonpolitical nature of the Society.

On my arrival in Memphis I received a telegram reporting a rumor that assistant chiefs, regional foresters, and directors of Forest Service experiment stations were slated for "Schedule C" political appointments. Since we were unable to get a confirmation of this rumor, the Council decided to take no action to reaffirm our existing policy of opposition to such a move. On October 16, a Memphis newspaper carried a story captioned "Leading Forester Asks GOP For Clarification" in which the party concerned used his 1947-1948 presidency of the Society to provide stature to his interview with the reporter. The story made it appear that the Society, meeting in Memphis, was playing partisan politics. On October 17, another Memphis newspaper carried a copy of the telegram to the president with the sender's statement that this "was not an official action of the Society."

In order to make the position of the Society clear, the Council authorized me to send a clarifying telegram to the President of the United States and the secretary of the Department of Agriculture. We received a long telegraphic reply from the secretary which closed with the following: "There has been no change in the career system and leadership of the Forest Service and none is contemplated by this administration." /s/ Ezra Taft Benson, Secretary of Agriculture. [For more details, see "President's Column," Journal of Forestry, December 1956, p. 855.]

Fry: And this was at the time you were president?

Nelson: Yes.

Fry: I gather that during that time there was a lot of criticism of Eisenhower on the part of some of the foresters in the U.S. Forest Service, and I wondered if this ever came into an open issue in SAF.

Nelson: No, I don't now recall any particular issues or criticism.

Fry: Did SAF, along about this time, take any action on things like the Wilderness Act or multiple use?

Nelson: No. Of course, we had had wilderness with us for quite a long time. In fact, the Forest Service designated several such areas in the early 1920s. But the big wilderness push hadn't taken place at that time. It started in the late 1950s, and the Wilderness Act was passed in 1964. What was the other one you asked about?

Fry: A multiple use act.

Nelson: Multiple use. We had always stood for multiple use.

Fry: The issue of federal control of forest operations was pretty much a dead issue at that time, wasn't it?

Nelson: By that time it was. Pursuit of federal regulations died with the retirement of Chief Lyle Watts in the early fifties.

Fry: And transfer of the United States Forest Service from Agriculture to Interior was also dead?

Nelson: That was also past--although it still pops up occasionally. With the exception of the election action, we didn't have any big issues that were trying to blow things out of the water. That was a pretty stable period, if you'll recall. Eisenhower kind of went along with the way things were, and he didn't stir up any more than he had to. I don't think that Eisenhower gave the leadership that he could have. He disappointed me in the leadership that he did give, particularly as far as the military was concerned. I thought having his background he would give stronger leadership there than he seemed to give.

Fry: You mean to the total defense establishment, or the conduct of the Korean War?

Nelson: Yes--bringing the establishment into more of a coordinated and harmonious organization.

Fry: In its development?

Nelson: Yes.

Fry: The air force versus the navy and all this is what you're referring to, right?

Nelson: Yes. Here again, that's kind of dim in my mind. Time seems to soften impressions.

Director of the AFA

Fry: You were also involved with the AFA, weren't you?

Nelson: Yes. In fact, in 1953 the American Forestry Association held a big conference in Washington, D.C., at which time they presented and later confirmed by vote of the membership, national programs and objectives for which the Association would work. Prior to this conference, they held a planning conference at Higgins Lake in Michigan. This planning group was composed of representatives of organizations--all interest groups. I participated in the Higgins Lake meeting and in the following 1953 conference at Washington.

I've forgotten when I became a director of the American Forestry Association--about that time or soon after. Anyway, there were two proposals from that conference in which I played a role. The first was to try to correct or improve the 1872 mining claim laws which were being exploited by speculators making phony claims and then peddling them for subdivisions, resorts, or other purposes. The mining claim laws were being terribly abused. Congressman Clair Engle of Redding, California, and others had a number of times introduced legislation in an effort to correct the situation. One of the planks in the AFA platform was to try to get legislation through Congress to accomplish this. Don P. Johnston was then president, and Lowell Besley was executive vice-president. Besley finally got the two federal departments and the mining industry to agree to meet for the purpose of trying to develop legislation to correct the mining claims problem. The legitimate mining industry was unhappy with the situation because they were being blamed for violating the intent of the law.

Well, they got a meeting put together, and then they wondered who could act as chairman--someone who was familiar with the problem but had no official axe to grind. One morning I got a phone call from AFA in Washington wanting to know if I would chair the meeting. I accepted the assignment and we met on February 10, 1955 in Washington. We had seven representatives from Interior, seven from Agriculture, and a like number from the American Mining Congress.

In one day's hard work, we pounded out the basic principles of legislation on which we could all generally agree. Then the counselor for the Department of Interior and the counselor for the American Mining Congress (who was chief counselor for the Kennicott Copper Company) worked for a good many weeks putting together legislation designed around the concepts that we developed that day. The American Mining Congress then circulated the proposed

Nelson: legislation throughout the industry. By and large, it was accepted. Clair Engle accepted it and introduced it in Congress, and it passed. This became Public Law 167, the Multiple Use Mining Act, which separates the mineral resources from the surface resources and provides the Department of Agriculture and the Department of Interior the right to manage the surface resources and the miners to operate the mineral resource (the miner being entitled to the resource and the ground surface which is necessary for his operation). This also called for review of all mining claims and development of their authenticity; between the two departments--Interior and Agriculture--this job now has been largely accomplished. As a result, the mining claim cloud that rested on thousands of acres of federal lands has been removed. It was a successful enterprise.

One requirement that has caused some problems is that the law put sand, rock, and gravel under the mineral leasing act and not under the claim act. Incidentally, the Multiple Use Mining Act was signed by President Eisenhower at Geneva, Switzerland when he was there for a summit conference that summer (1955).

Fry: Do you have anything more to say about what some of the difficult points were to iron out by your committee?

Nelson: I can't remember the details, but we had some rough going. I thought for a while that we were going to break our pick on one or two issues. Several times it looked like the meeting would break up, but we got back on track. I think the main thing was establishing an area of confidence between each other. Here were two strongly opposed groups. They'd been at sword's point for a long, long time, and yet they both realized that something had to be done. The industry knew that many speculators were exploiting the mining claim laws, which was damaging the mining industry as a whole. They realized something had to be done. We were finally able to sit around a table and discuss some of these issues, logically and coolly. With everybody recognizing the problem, it was decided that we had better do something about it, and we were able to work it all out.

Fry: Who was in on this from Agriculture?

Nelson: McArdle, chief of the Forest Service, and the assistant secretary of agriculture.

Fry: Agriculture--Peterson?

Nelson: Yes, you are right, it was Peterson. Orme Lewis, assistant secretary of the interior. Mr. Bennett, counsel for the Department--sorry that I don't recall the names of all who participated in that important meeting.

Fry: Well, anyway, you had undersecretaries or assistant secretaries from both departments.

Nelson: Yes, and the chiefs of Forestry and the Bureau of Land Management and the counsel from each department. The American Mining counsel was represented by Harry Moffat and a very fine attorney from Kennicott Copper from Salt Lake City. It was a top level group of men. They recognized that something had to be done, and they did it. Basically, it's been very successful.

Land Ownership Study by the AFA

Fry: I wanted to ask you about the book--which has been quite valuable to me--that came out while I think you were on the committee, the land ownership committee, when you were a director of AFA.

Nelson: Yes, that was the second item in which I played a role. In 1953, another program that we recommended was to get a study of land ownership in the various states to see how the land ownership patterns had developed and how they were developing and the manner in which the resources were being used and the manner in which public agencies were administering their jurisdictions, and to see if we could make any recommendations that would improve the situation. That recommendation was the result of the 1953 AFA program and policy conference. Here again, California, always being in the lead, we said, "If we can get some money we'll take it on as a project."

Fry: Sort of a pilot project?

Nelson: Yes. The Association proposed three pilot studies, then, hoping that the other states would pick it up and carry on the idea. With the help of Emanuel Fritz, who was then retained by Mr. Renborg's Nutrilite Foundation and who was very interested in the whole conservation field and particularly forestry, we were able to get financial help. AFA received two grants, totaling $50,000, from Mr. Renborg for the study and its publication.

We were able to get Dr. Samuel Dana, Dean Emeritus of the University of Michigan, to take on this job and, as an assistant to him, Professor Emeritus Myron Krueger from the School of Forestry, University of California. In order to broaden the thinking and to relate the study to the nation as a whole and also to give some guidance, we established a nationwide committee, bringing a few men from over the country. I remember Otto Wolff, a very progressive sheepman from South Dakota. There

Nelson: was Walter Myers, Jr., the executive director of the Forest Farmers Association of Georgia, and men of that quality representing forestry, wildlife, water, and the general public. And then I added a number of, well, I added a representative from each of our resource interest groups in California. This group acted as a review and advisory council.

Everybody responded and worked with us except the Sierra Club, who didn't even acknowledge my invitation. (They did the same thing to our California Public Outdoor Recreation Plan development.)

Fry: On what grounds?

Nelson: Huh! They never gave us any grounds. They didn't even acknowledge our invitations.

This not only gave us an advisory group, but it gave us entree for Dr. Samuel Dana and Myron Krueger to work with the resource groups throughout the state, because they were a part of the program and they knew what was going on. Of course, Dr. Dana is an unusual man, and he put together this very excellent book titled California Lands: Ownership, Use, and Management. Anyway, like many reports, you wonder whether they do any good or not. But I found it being used by many of our legislators as a reference book. We made recommendations for the creation of a council looking toward the coordination of resource programs. That in effect has come about through the creation of the Resources Agency, but I can't claim that it came about because of the report.

Since then, with a foundation grant from the Hill Foundation, a similar report has been developed in Minnesota, and the Old Dominion Foundation financed a similar report for North Carolina. So we got our three reports, but no one else picked up the idea. Of course, many new things have moved into the picture since then, and all resources are being more intensively studied nationwide.

Fry: Yes. I was just wondering how this is going to be kept up-to-date. We ought to build on it.

Nelson: I don't think it will. It's just something to build on. It did bring everything up-to-date to that time. It's a very good reference.

Fry: Was this generally accepted in its preliminary draft by the different committees?

Nelson: Yes, it was. Very well accepted. Oh, there was a little fly-specking, of course. But with Dr. Dana doing the job, and his excellent ability to present it, it was widely accepted, yes.

National Outdoor Recreation Resources Review

Nelson: You want to know about the Outdoor Recreation Resources Review Commission.

Fry: Yes, I do.

Nelson: This was a presidential commission, established as a result of congressional action, calling for a complete review of the recreation problems confronting the nation. Laurence Rockefeller was chairman of the commission. The commission was made up of six representatives from the Senate, six representatives from the House, and six laymen-at-large representing various interests, with Laurence Rockefeller as chairman. All laymen were appointed by the President.

Then, the commission designated an advisory committee of twenty-five people from over the nation representing various interest groups. I was fortunate in being chosen as one of these. The governor of each state was required to designate a liaison officer for staff communication between the states and the commission. I was designated by Governor Brown for that position. This was a three-year study by the time they got the operation off the ground.

On March 23, 1959, I met with Laurence Rockefeller, Frank Sargent from Massachusetts, Hal Wilm of New York, Maurice Goddard of Pennsylvania, and the ORRRC staff. This conference was called to review our experiences and problems in developing the California Public Outdoor Recreation Plan. The commission did a more sophisticated job than we because they had a lot more money. Their problem was bigger because it was nationwide, and they handled many of their projects on a contractual basis with the consulting individuals, many of them being university professors. They handled some studies under contracts with different state and federal agencies.

The advisory group met twice a year. We were constantly fed material from them after they got going, so that we kept abreast of what was happening. At these semiannual meetings, we'd break into interest groups and go over that portion of their work that dealt with that particular group and then make

Nelson: our report and recommendations to the group as a whole. It so happened that every time we met, I was made chairman of one of these groups, and a few of us worked most all night between the two-day sessions putting our material together so we could report the next day. It was very interesting.

Fry: Was your work as chairman always concerned with one particular phase of this?

Nelson: No, it might be one thing this time and something else the next time.

Fry: But not the same?

Nelson: No, it was passed around so we got a variety of viewpoints. It was a pretty good system.

Fry: There was one issue of whether federal activities in this field should be centered in the Department of Interior or in a separate commission to report to the President and Congress. And I understand that the commission considered the separate commission an ideal solution, but they felt this would never pass Congress. Were you close enough to follow this?

Nelson: No, I wasn't. Of course, the commission had a lot of these debates among themselves that we were never exposed to.

Fry: Did you think the formation of the Bureau of Outdoor Recreation in the Department of Interior to be good?

Nelson: Yes, I concurred with that. They had to have somebody that was responsible for carrying out the provisions of the law. I felt that Interior was the proper place for it.

Fry: Did you have any special concerns or interests in the report on any other issue?

Nelson: I was, of course, interested in following it and working with it to see how it conformed to our own, and it was very satisfying when their consultants' reports would come in and they were practically right down the line with our findings. Of course, we provided them with a great deal of material. Every state did.

Fry: In California.

Nelson: From California. What we had done in our study was very helpful, but we had to put it into their form, and then that was all put into computers so they could analyze it.

Fry: Were you able to use some of this revised new material in your own recreation report subsequently? Or did you have a subsequent recreation report?

Nelson: No, ours was ahead of theirs.

Fry: Well, I thought there was another one that was put out--a second or third up-to-date edition.

Nelson: The Department of Parks and Recreation have done some work in bringing it up to date. In fact, they had a contract with Stanford Research Institute to bring much of this up to date. In reviewing that, I couldn't help but be impressed that a lot of their material was just lifted out of our report and updated a little bit.

Fry: All in all, then, you felt that the Outdoor Recreation Resources Review Commission Report took into account pretty well the needs of the various states and the relationship of states to federal government in the proposals.

Nelson: I think so, yes. That's the report up there, those twenty-six or twenty-seven volumes [pointing to shelf].

Fry: I think I saw the preliminary. I didn't read all that, I know. I saw one that was about this big [gesture]. That must have been the one for public consumption.

Nelson: There's one of these that is the overall general summary report.

Fry: [Pause] Well, I think that just about wraps up the main things.

Nelson: You think we've about bundled it up? I might add that all of these dates and everything are entirely from memory, but they are things that can be quite readily checked.

Fry: We usually check them.

Nelson: But I think they're generally pretty close.

SACRAMENTO BEE

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State Conservation Director Resigns

Special to The Bee

Sources in the State Building here revealed today that DeWitt Nelson, state director of conservation, has resigned his post, effective Aug. 31. These sources also said Dr. Ian Campbell of San Francisco, chief of the State Division of Mines and Geology, is being considered as a possible successor to Nelson, who has been active in federal and state conservation programs in California for more than 40 years.

Nelson, the sources said, will return to his alma mater, Iowa State University, to become a visiting lecturer for at least a year. Meantime, he willl leave Sacramento Friday for Europe. He received the alumni merit award from Iowa State in 1963.

First Head Of Agency

Nelson has headed the Department of Conservation since 1961, when it was created as a member department of the State Resources Agency.

He joined California service in 1944 as state forester. In 1953 he was named director of natural resources by Gov Earl Warren, and was reappointed to the post by Gov. Goodwin J. Knight and by Gov. Edmund G. Brown. In 1961 he was named by Brown to head the newly crated department of conservation.

Nelson also has held the post of vice chairman of the State Water Quality Control Board.

Native Of Iowa

A native of Madrid, Iowa, Nelson was graduated from Iowa State in 1925 with a degree in forestry. From 1925 to 1944 he served with the U.S. Forest Service in California. He served at various times as supervisor of the Trinity, Shasta, Tahoe and San Bernardino National Forests.

The State Department of Conservation is composed of the divisions of forestry, mines and geology, oil and gas and soil conservation.

LOOKING TOWARD "RETIREMENT"

Teaching

Fry: Why don't you say what you're going to do now that you've retired. Is that accurate--have you retired, or resigned?

Nelson: I retire next Wednesday.

Fry: It is officially your retirement, then?

Nelson; Yes. I'll be retiring from public service after nineteen years in the U.S. Forest Service and twenty-two years in state service.

Fry: But isn't it an early retirement?

Nelson: Well, I'll be sixty-six next January. I don't have to retire. I'm ready for a change. On, about two years ago, Dr. Carl Stoltenberg, head of the Department of Forestry at Iowa State University, approached me and wanted to know if I'd be interested in coming back to Ames and doing some teaching and passing on to the students some of the benefits of my experience I told him I certainly would when I was ready to retire, but I wanted to finish this term with Governor Brown, if I could. Then last winter he put the question to me again. So we got together with the dean of the College of Agriculture. They wanted me for a whole year's service instead of just one or two quarters. We met last February and I agreed to come the first of September.

It was a difficult decision to make. It's a critical time to leave the governor; after all, he has been very fair to me, and I had hoped and planned to run the rest of the course with him for this term. But nevertheless, one can't turn down opportunities either. I don't want to go through another term, for example, even if it were possible. I'm ready for a change.

Fry: I thought maybe--always thinking in political terms--you retired right now so that your successor could be a Brown appointee.

Nelson: No, that never entered into it. Of course, I am a Brown appointee myself. And my successor has only an interim appointment. Dr. Ian Campbell, chief of our Division of Mines and Geology, is going to take on the directorship until everybody sees what will happen at the election. Dr. Campbell is not interested in the job. In fact, he doesn't even want it on an interim basis, but is willing to do so for the governor.

Fry: Did you suggest him?

Nelson: Well, Hugo Fisher and I worked that out between us. Dr. Campbell is a very sound individual--should we say he's a middle-of-the-roader--and will keep things on an even keel and won't upset them one way or the other as far as the governor is concerned during this period. Of course, this is a sensitive period. To get a man to take an appointment now, not knowing what's going to happen in November, would be most difficult. So the governor's desire was, "Let's make an interim appointment and then see which way we go. Why upset the ship at this time?" I think it was a wise decision. It's full of regrets that I leave now, but it's mixed emotions too--I'm happy to be leaving.

Fry: With all these wonderful parties you've been having, I can see you've already had some benefits.

Nelson: Yes, and I don't think this has done the governor any harm either. And win, lose, or draw, it's been a wonderful tour.

Fry: After this year is over, what do you want to do?

Nelson: I'm going to run this year first. I have had casual discussion with several universities for one or two quarters here and there. And I've had pretty firm discussions with the University of California. (This is off the record at this time, but it is planned for the winter quarter of 1968.) Where do we go from there? I'm going to play it by ear.

Fry: In other words, you and your wife are free to just sort of tramp around. You can be the voice of conservation in the United States.

Nelson: I'm ready for a change, but I'm not ready to quit work. I want to be active.

Mr. and Mrs. DeWitt Nelson at his testimonial dinner at the time of his retirement from state service (August 17, 1966)

Changes in the Future of Forestry

Fry: Do you foresee any changes here in things in which you might have been holding your finger in the dike?

Nelson: Yes, I think so. I think there are going to be some changes in forest practices. I've tried to get some changes in forest practices. We've succeeded in part. But if the industry isn't willing to accept their full measure of responsibility, they're going to have to accept more regulation. I'm meeting with a group of them tomorrow night, and I'm going to tell them so. I have told them time and time again, but there's a certain element there that--well, they just remain adamant, and they're writing their own ticket.

Fry: You feel their countdown has started, then?

Nelson: Their countdown has started, yes.

Fry: This is what? Where would more regulation take place?

Nelson: If they won't improve their methods of erosion control, for example, they're going to be--they can be required by statute to do more in this regard. One method that this can be approached by is a rather indirect but effective method, because this is a form of stream pollution. By establishing the water quality requirements in all those streams through the regional water quality control boards, and approved by the state board, it will give them some regulation that they will be hard pressed to meet.

Fry: And this they already have statutory authorization for?

Nelson: Yes, they'll need a few changes in it. They might have to have some change, but not a great deal. No, there's some of this industrial group that I hold no break for, and they know it.

Fry: Is this in any particular type of forest--pine, redwood?

Nelson: The most critical is the redwood because of the steepness of the slopes, the erosive character of the soil, and the high intensity of rainfall. It's a terribly difficult problem, and there's no simple answer, there's no single answer. No matter what they do, they can't eliminate all of the erosion. You can do a lot to minimize it. It'll cost money, it'll take work, and it'll take supervision. But I think it's going to come, and I think it has to.

Fry: As costs go up to log redwood, and as the old growth is cut out, even if this is two generations from now, do you foresee different types of forests along our coasts? Perhaps Douglas fir and so forth, which is more financially feasible.

Nelson: There is going to be a change, naturally, because we never will grow redwood to the size it is today, except in our museums--the parks. There will be changes in the use of the commodity; there will be changes in management. We're going to be using smaller timber. We are today, with various techniques of pulping, with particle board, with end and edge gluing and one thing and another, making big boards out of little boards, as good or better than a single board.

In this country, some claim logging is a dying industry. It is not a dying industry; it's a vital and dynamic industry. But it changes with the times, it changes with the growth of the timber, and it changes with the commodity demand by the people.

Fry: Is it an industry that is easily changed? Is the leadership in this industry flexible enough to change the nature of it in this way?

Nelson: They have gone a long ways in the last ten years. For example, plywood was a very minor item. I have this note here, in the Z'berg report, that in 1947 there were only two fledgling plywood production plants--Crescent City and Arcata--which produced seventy million square feet. In 1965, twenty-one plants produced 1228 billion square feet. This is 9.87 percent of the nation's plywood production.

Since that time, particle board has come into being. Since that time, three major pulp plants have come into the state. Also since that time, there've been technological developments in producing a better quality of product. Prime-coating redwood, for example; putting it out to the user in practically finished form. Now you see these slab units going up in buildings; now they're beginning to fabricate slab units out of lumber. And of course, during this same period, there's been a great increase in the techniques of developing the laminated beams that are popular and very practical.

It's a changing industry; it's a highly competitive industry. When you get right down to it, like all industries and all businesses, it is sort of a dog eat dog type of thing. And there are survival problems. Only the bigger ones are going to survive, and only the bigger ones can provide the level of forest management that we must have. The little man--the little operator--can't do it.

Fry: Is the redwood industry at a slight disadvantage in its development when you compare it with pine and fir, because pine and fir do occur in other states, like Oregon and Washington; redwood, no matter what it does, is pioneering?

Nelson: That's been one of the advantages of redwood, because it is a very different and choice product.

Fry: But it has no precedent for being elsewhere.

Nelson: No, it has no precedent. But it has qualities that no other wood has. If you would compare the market price over the years, the redwood market has not fluctuated like the pine and fir markets have. In the north coast, many people think all that country is redwood. It isn't; it's a mixture of fir, spruce, hemlock, and redwood. There is a misunderstanding of what constitutes a redwood forest. By definition, if 20 percent of the stand is made up of redwood, it is then designated as a redwood stand. Really it's a mixed conifer stand. You get the pure redwoods in the alluvial flats and on the lower reaches of the slope. As you move up the slope, it gets mixed with Douglas fir. So there's a lot of misunderstanding.

Fry: Is the clear cutting, such as done by Arcata, for cutting of all types of stands?

Nelson: Clear cutting is one form of silviculture. Arcata started out on a partial or selection cut method. Unfortunately, they suffered severe wind-throw and breakage of the trees left standing. Each summer they had to go back and salvage what they could. In this process, they soon had nearly a clear cut area; and every time they logged out the salvage material, they tore out a lot of young trees that had come in after the initial logging.

Neither redwood nor Douglas fir are climax types. They need full sun to germinate and grow. So clear cutting, followed by reseeding or planting, is the surest way of assuring a future redwood or Douglas fir forest. Of course, the visual impact of Arcata's clear cut beside State Highway 101 blew everything out of the water. Neither the industry or the profession has recovered from it.

We are getting over a hundred thousand acres reforested through a required reseeding process by the industry. But there was no mention of that made in the Z'berg report. The committee was as biased in their approach as the industry is in theirs. We tried to get the committee into Jackson State Forest. There we're carrying on demonstrations of management--what can be done, what are the problems in connection to stream protection, what does it cost under our controlled operation to protect those streams? Demonstrations on how to manage second-growth timber. But no, they're not interested in that; they're only interested in looking for the spectacular. I don't think they're interested in a balanced report. That's my objection. Consequently, judgments are being made with insufficient facts, and that's how so many judgments are made.

Fry: There is likely to be a big change, then, in the near future.

Nelson: Yes, primarily because of emotionalism, because of propaganda from the groups we've mentioned, because they have been unwilling to really look the facts in the face. California is growing trees, both redwood and Douglas fir trees, whether some of these people are willing to admit it or not.

Above left: Sharlene Patten Nelson (Mrs. Ted Nelson), 1955.

Above center: Ted W. Nelson and DeWitt Nelson (Commodore of Lake Washington Sailing Club), 1949.

Above right: Mrs. DeWitt (Sadiebelle) Nelson, 1960.

Left: DeWitt and Sadiebelle Nelson. Retirement party, August 19, 1966.

ADDENDUM WRITTEN BY DeWITT NELSON IN INTERVIEW FORMAT--MAY, 1976

Ten Years Later

Fry: Here we are in 1976. Ten years since we were last together. Many things have happened during this time, not to mention where you have been and what you have been doing. Do you have any general comments before we get down to specifics?

Nelson: Yes, much has happened. I have some comments and observations to make about several of the happenings. In fact, I believe I anticipated some of them, particularly some of the problems confronting the timber industry and the requirements of more stringent regulations.

However, I think we should follow our regular format and proceed in a chronological order.

Fry: Well, that takes us back to the first of September, 1966, when you reported to the Department of Forestry at Iowa State University as a visiting lecturer.

Iowa State University

Nelson: Okay. We arrived in Ames on Sunday, September 4, the day before Labor Day. Dr. Carl Stoltenberg, head of the Department of Forestry, had arranged for a lovely apartment with Mr. and Mrs. Howard Schori--delightful people. I was enjoying my carefree innocence, not knowing what was ahead of me.

Fry: You mean you had no advance information on what you were to teach?

Nelson: None at all. Of course, I expected it would be related to my background. Well, on Labor Day I checked in with Carl. I learned that I was to teach a three-hour course in "Conservation," and that

Nelson: there would be other duties assigned. That turned out to be a full week of meetings and the task of developing a syllabus for the quarter.

The first thing I did was to broaden my subject matter to "Resource Problems, Programs and Policies with Emphasis on Interdisciplinary Relationships." At eight o'clock the next Monday morning I faced my first class--a class of some sixty students from thirteen different curricula over the campus, ranging from sophomores to graduate students. To top it off, I found that Dr. Ross B. Talbot, chairman of the Department of Political Science, was auditing my course. He stayed with me for the full quarter, and we became good friends.

Fry: That was a pretty fancy title you gave your course. What all did you cover and how did it work out?

Nelson: It worked out fine. At that time there were many issues before Congress such as the redwood national park proposal, the wild and scenic rivers legislation, the North Cascades issue, the proposed Bridge Canyon and Marble Canyon dams on the Colorado River which threatened the Grand Canyon National Park, and land use and metropolitan sprawl. We explored these and similar issues. There was no textbook, but there was a lot of current reading material. It worked out very well. It was stimulating to me and I think to the students.

I also found myself acting as a counselor to a number of students. I found the students anxious to talk with someone who had spent his life in the action area outside of the university. Also, I think I was a good listener. I found my duties very demanding and very rewarding. I enjoyed most the one-to-one contact with the students.

Fry: I take it that you were able to chart your own course to a large extent.

Nelson: Yes, very much so. Of course, I had some extra assignments too. Associate Dean of Agriculture, Dr. Louis Thompson, was on the Program Committee for the National Association of State Universities and Land Grant Colleges. He scheduled me to speak before their annual meeting in Washington, D. C. in November on "Natural Resource Use." My assignment was to relate a practitioner's experience to natural resource needs and the development of new curricula in the field of recreation. A very challenging and interesting subject.

Before I realized it, the fall quarter was over and the winter quarter started. It was Thanksgiving.

Fry: By now I presume you had got into the swing of academic life and consequently life was getting a little simpler?

Nelson: Don't let anyone tell you that teaching is a pushover. At least it wasn't for me. I felt a real obligation to the students and the institution, and it seemed that every week I would get involved in new activities. Of course I liked it. On top of that, I found that they expected a visiting lecturer to really do some lecturing.

Fry: You mean in addition to your teaching and counseling programs?

Nelson: Yes. In the winter quarter I handled a course in "Natural Resource Administration" for upper classmen. In addition, Dr. Stoltenberg asked me to present a series of six evening lectures for the public. One a week for six weeks. About this same time he accepted the position of dean, School of Forestry at Oregon State University, and Dr. George Thomson took over as acting head.

Public Lecture Series

Fry: Did the plan for a lecture series remain intact under the new dean?

Nelson: Yes indeed. When we had arrived in Ames the previous September it seemed that every new person I met asked one of two questions: When are you going to establish a redwood national park, or when are you going to stop cutting all the redwoods? I found the papers and magazines back there were just as full of material (propaganda) as those on the west coast, and that nowhere was there ever a mention of our twenty-eight California state parks embracing more than 110,000 acres of which some 55,000 acres are the superlative groves of virgin redwoods. All the writers seemed to carefully steer clear of these and other facts. Very often it isn't what is said but what goes unsaid that provides misleading information.

Anyway, I outlined a lecture series under the title of "Preservation, Production and Politics--Facets of Wildland Use." We kicked it off on January 11, 1967, in the MacKay Hall with the subject "What About the Redwoods?" I put it on a case study basis. After some introductory remarks, I showed a film on the redwood region, followed by a twenty-five-minute presentation built around six questions: (1) What is the background, and how much of the redwoods are presently preserved in state parks? (2) What are the current national park proposals? (3) Should there be a redwood national park? (4) How much will it cost? (5) What will be the impact on the local economy--the tax base and payrolls? (6) Is the coast redwood a vanishing species? This was then followed by a very active question and answer period.

Fry: How did it go?

Nelson: Wonderful. It was controversial enough to get the series off to a good start with a packed house. The same format was followed in the rest of the lectures. On the five following lecture nights we had blizzards; but in spite of the weather we had a full house every time with people coming from as far away as Des Moines, Marshalltown, and Boone, as well as from Ames.

The other lectures were: "Saving the High Desert Range Resources;" "Forest Patterns--Beauty and Use;" "The North Cascade Controversy;" and "Deadline for Decision" (a fifty-four-minute film prepared by the California Resources Agency in 1966 which graphically portrayed the people and resource problems of California with its exploding population).

A New Program in Outdoor Recreation

Fry: Sounds like it was an interesting program. You mentioned something about a new curriculum in the field of recreation.

Nelson: Oh yes. The year before, a new program had been developed by the College of Agriculture and its various departments titled "Resource Development for Outdoor Recreation." It was an interdisciplinary curriculum using appropriate courses and contributions from a number of departments from over the campus. The dean asked me if I would stay on and take charge of the new program starting in the fall quarter of 1967. It was to be placed in the Department of Forestry. I had already committed myself for the next winter quarter (1968) as a Regents' Professor at the University of California, Berkeley, and the spring quarter (1968) as a Visiting Professor at Oregon State University, Corvallis. But here was another challenge and I accepted the opportunity. So, we returned to ISU for the 1967 fall quarter, with me as a full professor, to launch the new program. I then took a leave of absence for the winter and spring quarters and again returned to Ames in the fall of 1968 to carry on the new recreation curriculum until I ran out of my seventy-year warranty in the spring of 1971.

Glancing Back

Nelson: Glancing back for a moment, if I may. In February of 1967, Governor Ronald Reagan's appointment secretary, a Mr. Smith, called me and invited me back to my old position of director, Department of

Nelson: Conservation. Like Coolidge, I chose "not to." Also that spring I had two calls from Milton A. Pearl, director of the Public Land Law Review Commission, to come to Washington, D. C., as a part of his staff. That was the public land study chaired by Congressman Wayne N. Aspinal of Colorado. Again, I was too firmly committed to the three universities.

Conservation--Now or Never

Nelson: We returned to Sacramento for the summer of 1967. While there, I was contacted by Nicholas Roosevelt, chairman of the California Recreation Commission. Dodd, Mead and Company had commissioned him to write a book on the subject of conservation. It was good to see him again and to exchange ideas about his project. As a result, I put him in touch with Grant Morse and others of the U.S. Forest Service, which resulted in an excellent chapter on "Multiple Use of Forests" and a chapter on "Fighting Forest Fires." I was familiar with a rather unique system of county parks that the Iowa Conservation Commission had developed. Consequently, in August of 1968, Nick visited us in Iowa where he explored the Iowa program which, in turn, resulted in a chapter on "Iowa Points the Way" in his very excellent book titled Conservation--Now or Never, published in 1970.

University of California

Fry: What were your assignments at the University of California during the winter quarter of 1968? Did they also require both teaching and lecturing?

Nelson: Yes indeed. I had two seminar courses for graduate students, one of which I shared with Dr. Henry Vaux on "Recreational Use of Forest and Wildlands." Working with Henry was a great experience, for he is an excellent teacher.

My other seminar was on "Public Administration of Forest and Wildland Resources."

Fry: How about the lectures?

Nelson: I gave three on the theme of "Conflicts, Competition and Conservation--Problems of Wildland Use." Of course, the redwood issue was getting hotter every day, so I brought my "What About the Redwoods?" speech up to date and used it for a starter. That was followed by "Wild Rivers, Water Development, and Water Pollution Control," and last, "Conservation Conflicts--the Wormy Apple."

Nelson: UC was another interesting experience with stimulating contacts, but quarters are short and we were soon headed north for Oregon State University.

Fry: You were really on the move.

Nelson: Yes, we sometimes referred to ourselves as migrant workers. In fact, shortly after our arrival in Corvallis, Mrs. Nelson went to the bank to cash a check. The manager asked her what her husband did, and Sadiebelle replied, "He's a migrant worker." She got her money.

Fry: Did you have a similar pattern at Oregon?

Nelson: Yes, quite so. There I had two three-hour classes on the subject of public policy and administration. They too wanted some lectures. My first was on "Difficulties in Communication as Illustrated by Water Resource Problems"; the second one was "Conflicts in Conservation"; and the third was again "What About the Redwoods?" Congress was rapidly approaching a decision on the redwood national park, and several new elements had been introduced.

Congressional Hearing on the Redwood National Park

Nelson: On April 16, 1968 the House Subcommittee on Interior and Insular Affairs held a public hearing on the redwood national park proposals in Crescent City. I attended the hearing and spoke in opposition to that portion of S2515 which authorized the exchange of most of the Northern Redwood Purchase Unit of the Forest Service for private lands to be included in the proposed park. The purpose for this exchange procedure was to reduce the cash outlay in the total acquisition.

I opposed this procedure on two counts: (1) the precedent it could establish for trading Forest Service land for private land in creating parks in many parts of the country, and (2) it would transfer to private timber operators two miles of the only public land access in that area to one of America's finest fishing streams--land on which the Forest Service planned to develop four picnic and boat-launching sites plus seven campgrounds. In addition, these lands contained ten miles of salmon and steelhead tributary spawning streams. These were facts that were not published, and I believed that these public values should be retained by the Forest Service.

Nelson: Time was running out. On October 2, 1968, President Johnson signed S2515, which immediately took possession of 28,100 acres of land held by four major lumber companies and authorized the exchange of all but 935 acres (the Yurok Experimental Forest) of the Northern Redwood Unit. The bill provided $92 million for the purchase. They call it a 58,000-acre redwood national park, but 27,500 acres are state parks; and so far the state has not agreed to transfer them to the federal government.

Fry: Were you disappointed that the exchange provision was left in the bill?

Nelson: Of course I was. But not surprised. I well knew the power behind the bill and all its provisions. Anyone who opposed any part of it was an outright "destroyer of the environment."

Fry: What do you think of the park which has resulted from that legislation?

Nelson: They say a camel was designed by a committee. Unfortunately the redwood park was also. It has two ends tied together with a narrow thirty-three-mile strip of shoreline, some of which backs up to superlative state parks. The south end, the so-called worm, a half-mile-wide strip extending up Redwood Creek for some eight miles to include the tall trees, is not and never will be a suitable unit of the park. It has too many problems--physical, political, financial, and emotional. What should have been taken was the magnificent Skunk Cabbage Creek watershed. It was beautiful with choice virgin redwoods, untouched by the loggers axe, and with terrain that visitors could enjoy. Now, eight years after the purchase, there is little to attract visitors to the park except the coastal beaches. There has been one small attractive development at the Ladybird Johnson Grove. It is a sad story. What should and could have been another beautiful redwood park has become a tragic and controversial issue between government, industry, and the redwood park proponents.

Fry: Did you enjoy your stopover in Oregon?

Nelson: Yes, very much. It was another interesting quarter, but it too ended too soon. After a short visit with Ted and his family in Tacoma, we headed east through Glacier and Waterton Lakes National Parks to northern Minnesota where we visited the ISU Forestry Summer Camp. Then on to Ames.

Back To Iowa State University

Fry: This put you back into the new recreation curriculum.

Nelson: Right. We had launched the "Resource Development for Outdoor Recreation" curriculum the fall before with seven students. The fall of 1968 saw the enrollment greatly enlarged from both freshmen and transfer students. As I have mentioned, this was an interdisciplinary program using existing courses from a number of disciplines. Besides teaching several courses I worked with other units in getting them to relate their course material to the recreation programs and problems. Cooperation was generally good.

Before getting into the academic field, I had been led to believe that universities were very rigid in their course requirements. I found this to be untrue. If a student applied himself and knew what he wanted, and if he would work with his counselor, he could do a great deal in tailoring his program. I, of course, had much to learn. But I found Professors Fred Hopkins, Jr., and George Thomson most helpful and cooperative. This was true of the entire staff, but Fred and George were the ones I leaned on the most. I enjoyed close relations with Dr. Henry H. Webster, head of the Department of Forestry, and Associate Dean Louis Thompson, College of Agriculture.

Fry: What were some of the problems with the new program?

Nelson: One of my chief concerns was summer employment and career opportunities for the students. When the program was conceived, recreation programs were expanding rapidly and employment opportunities looked very promising. But by the late sixties all levels of government were tightening their belts, and jobs were hard to find. However, the National Park Service was launching a new recruitment program. It carried a "conditional appointment" upon graduation for a few selected summer employees. I got a quota of four sophomores out of their quota of forty-four placements. The concept was that upon graduation these students would be given special training at the Grand Canyon Training Center and given a civil service appointment. Due to budget constraints, this was a short-lived program; but the NPS carried through with the first year's quota, and I got four graduates into the Park Service. By hard work on the part of the Department and the students, we got most of the students placed--but not always what they had hoped for.

Fry: Let's see. You spent three more years at Iowa State. Were they as exciting as the first?

Nelson: Yes, in a different way. I was really a part of the institution. The recreation program became the fastest growing curriculum on campus. I had a heavy load of student counseling which I thoroughly enjoyed. We did considerable overhauling of both the forestry and the recreation curricula. I also got involved in some interesting extracurricular activities.

Other Duties

Fry: You seem to get involved in a variety of activities wherever you go. What were some of them here?

Nelson: One of the most interesting was an invitation to participate in a panel on "Agriculture and Natural Resources in General Education" sponsored by the National Research Council of the National Academy of Sciences. This gave me an opportunity to explore many of the biological, ecological, and environmental problems with some of the country's top educators. I had the privilege of presenting a progress report to the North Central Conference on Undergraduate Education in the Biological, Physical and Social Sciences for Students in Agriculture and Natural Resources at the University of Wisconsin in March, 1969.

In July of 1969 I was able to take advantage of a symposium at Yale on "Ecology as a Guide to Social Change." This symposium was led by Paul B. Sears, Professor Emeritus of Conservation, Yale University.

Public Land Law Review

Nelson: In June, 1970 the Public Land Law Review Commission published its report titled One-Third of the Nation's Land. In September, 1970 a national discussion forum on the report was held in Portland, Oregon. I served as chairman of a panel on "Disposal, Acquisition, and Exchange of Public Lands." Upon the request of the Commission, the College of Agriculture at ISU, in cooperation with the J.N. "Ding" Darling Foundation, held a similar conference for the mid-central states area. I participated in the planning and management of this conference. The report made many recommendations as to the management and disposition of the public lands. Since Congressman Wayne Aspinal was not reelected, it seems that this has become just another report to gather dust.

There were other interesting and stimulating activities, such as the Mid-Continent Park and Recreation Conference held at ISU. During my four years at ISU, I served as an SAF visiting scientist to a half dozen forestry schools, as well as speaking engagements at several others. This is enough to indicate that life was not monotonous.

School Is Out

Nelson: With my seventieth birthday on January 13, 1971 my academic clock ran down with the end of the school year. It too had its rewards: The students dedicated their 1971 Ames Forester to me, and on June 5 the Iowa State University Alumni Association honored me with the Distinguished Achievement Citation as a forester, conservationist, and educator. I quote from that citation: "His awareness of problems relating to natural resources far in advance of his time, and his significant role in bringing these issues to the attention of public and professional audiences, reflect great distinction on him and on his Alma Mater."

That ended a wonderful five years for both Sadiebelle and me. I felt that I had contributed something worthwhile; and through subsequent contacts with students, I am sure that I did.

Back To California

Fry: That was five years ago. I understand that you have been involved in a few things since your return to California.

Nelson: I got back to California in time (July, 1971) to help Francis Raymond and others in their support of Assemblyman Edwin Z'berg's bill requiring the registration and licensing of professional foresters. It successfully passed the legislature only to be vetoed by Governor Ronald Reagan. However, a slightly amended version of the same bill passed and was signed by Governor Reagan in 1972. The Sierra Club joined with the foresters in support of this legislation.

In August, I joined with John G. Miles of Eureka, Dr. Ralph Hall of Orinda, Jay Bentley of Berkeley, Dr. Del Thomas of Lafayette, and Dr. Lee T. Burcham of Sacramento in a new consulting firm of Natural Resources Management Corporation with our home office in Eureka. John Miles had had a small but successful consulting business for a number of years, and the new firm was built around it with John as president and major stockholder.

We endeavored to reach beyond the field of pure forestry. Consequently, we responded to a number of "Request for Proposal" bids to the Environmental Protection Agency and the Council on Environmental Quality. We spent considerable time and money preparing the estimates. Finally, CEQ sent out a request for bids on a study to determine what the environmental impact statements were costing the Forest Service and the Bureau of Land Management.

Nelson: Here was an area in which our group had both expertise and contacts. We submitted our bid. We and one other bidder were requested to come to Washington, D. C. for an interview. Jay Bentley went back, and after a brief conference, was advised that the bid was being given to the other party. That was all right, for the choice was theirs. But then he was taken to one side and informed, "We couldn't use your organization because of your forestry orientation. We must cater to our own clientele." We were simply used for a patsy. We then stayed in forestry and allied fields, and we were getting along very nicely, from Alaska to Peru.

I audited and critiqued a series of training courses dealing with current environmental administrative problems put on by a group of professors from UC Davis for the Forest Service.

Loyola University of Los Angeles

Nelson: Prior to that time, Mrs. William S. Rosecrans had generously endowed Loyola University of Los Angeles with funds from the Rosecrans Foundation. In recognition of this and previous gifts, the University established the Rosecrans Chair on Conservation. To start with, Dr. Joseph Schwartz, head of the Chemistry Department, was put in charge of developing a program. Mrs. Rosecrans put him in touch with me, and after several conferences we decided to try a series of lectures and seminars during the spring semester.

There was not sufficient earnings from the fund to support a resident professor. I presented two lectures and a seminar in January, 1972. This was followed at about thirty-day intervals with a lecture and seminar by Harvey Banks, former director of the Department of Water Resources and a nationally recognized water engineer; Bernard L. Orell, vice-president of Public Affairs, Weyerhaeuser Company (on public relations and communications); and Dr. Daniel M. Ogden, Jr., Dean, College of Humanities and Social Sciences, Colorado State University. Dr. Ogden had previously served as deputy director of the Bureau of Outdoor Recreation, Department of the Interior. The seminars proved to be successful, but the lecture periods were not popular. Recent information (1976) from Mrs. Rosecrans indicates that the Conservation Chair may have to be dropped. There is apparently a lack of leadership and interest in such a program at both the staff and student levels. This is to be regretted.

The DeWitt Nelson Training Center

Nelson: On May 30, 1972, the California Department of Youth Authority dedicated the DeWitt Nelson Training Center in my honor. The Center, located near Stockton, has responsibility for the training and treatment of young men, eighteen to twenty-one years of age, who can profit from an occupationally-oriented training program. The trainees are assigned to one of three basic programs: pre-forestry, academic-vocational education, or work experience.

This honor stems from my work in establishing the forestry conservation camps in cooperation with the Departments of Correction and Youth Authority starting back in the 1940s.

National Watershed Congress

Nelson: In June, 1972, I spoke at the 19th National Watershed Congress in San Diego. My assigned subject was "The Edge--The Effects of Watershed Management on Coastal Resources." A very interesting subject because it is at the edge where things start to unravel, whether it be a piece of cloth, a stream bank, a vegetative type, or the coastline.

In the latter part of June, I served on a panel of judges to inspect the conservation and resource management programs of a number of military bases. Our duty was to select the conservation award winners. It was an interesting opportunity to observe some excellent programs being handled by the military in a wide variety of situations.

The Sir William Schlich Memorial Medal

Fry: I understand that the Society of American Foresters made you an award.

Nelson: Yes. That was one of my greatest thrills. It occurred at our annual meeting in New York City on September 23, 1974. The Society awarded me the Sir William Schlich Memorial Medal. Happily, both Sadiebelle and Ted were with me at the time.

The 1945 Forest Practice Act Declared Unconstitutional

Fry: In the early seventies, the Forest Practice Act and Rules were declared unconstitutional. This caused a great deal of concern, and it seemed to take an awfully long time to get new legislation passed and new rules established. Would you like to comment on this?

Nelson: Certainly. This is a long and involved story. I will make my comments brief because T. F. Arvola, forest manager for the Division of Forestry from the late forties through the early seventies, has written a complete and thoroughly documented history of the regulation of logging in California. I have reviewed his manuscript and can vouch for its accuracy. It is to be published by the California State Department of Conservation.

Briefly, Bayside Timber Company of Redwood City applied to the San Mateo County Planning Commission in May of 1969 for a timber harvesting permit. The permit was issued with twenty-eight tough provisions regulating forest practices and log haul routes. Even though the logging company accepted the constraints, a local citizens committee led by two women (one was Mrs. Claire Dedrick, who was later appointed secretary of the Resources Agency by Governor Edmund G. Brown, Jr.) filed an appeal, and the County Board of Supervisors reversed the Planning Commission decision and revoked the permit.

Bayside Timber Company then went to court to seek relief. After much legal maneuvering, the appellate court on September 16, 1971 reversed the superior court's findings and ruled in favor of San Mateo County.

There was still ninety days before the court order became effective. Because of the statewide impact that such a decision would have, the Department of Conservation and the state attorney general petitioned for a rehearing. A rehearing was denied as was an appeal to the California State Supreme Court. Consequently, the forest practice rules were dead as of December 16, 1971. The Forest Practice Act was found to be unconstitutional because the rules were developed "by persons pecuniarily interested in the timber industry."

There followed two years of strenuous and often acrimonious sessions in and out of the legislature before a new forest practices act was passed and signed by Governor Reagan on September 26, 1973, as Chapter 880 of the Public Resources Code. It was known as the Z'berg-Nejedly Forest Practice Act of 1973.

Nelson: The new law reorganized the Board of Forestry and the District Technical Advisory Committees and set up rigid guidelines within which the Board must establish a new set of forest practice rules. This was further complicated by involvement with the California Environmental Quality Act of 1970. At last, on June 30, 1975, the Board of Forestry adopted new and environmentally strong rules.

This, however, is not the end of the debate. It continues, particularly in the Redwood Creek and Redwood National Park area in regard to erosion control and stream protection. Also, additional court actions are pending as of May, 1976.

How our forest and resource lands are to be used and managed depends on the willingness of people with different values to work together in developing solutions. Because our problems are so many and our common needs are so great, failure to develop workable and balanced solutions because of strong differences is as dangerous to our society and environment as if one point of view or the other were to dominate the field. In fact, I think it is more dangerous because there is constant turmoil and distrust accented by class action lawsuits.

Internal Problems

Nelson: For some time there had been growing signs of tension between the Department of Conservation and the Division of Forestry. While James Stearns was department director, he tried to get the California State Forester's position removed from civil service through an action of the personnel board. That failed because of public opposition.

In early February of 1974, Ray Hunter, then director, issued a wide-ranging reorganization plan for the division. It was issued as an edict without right of appeal. It appeared to be a harassment of certain employees and an arbitrary and capricious act of administration. This action on the part of the director really stirred up a hornets' nest.

Senator John J. Nejedly, chairman, Senate Committee on Natural Resources and Wildlife, joined with Assemblyman Edwin Z'berg, chairman, Assembly Committee on Natural Resources and Conservation, in holding a joint committee hearing on the subject. Director Hunter was conspicuous by being out of the country. None of us questioned the director's legal right to implement organizational change, but we did question the manner and the timing of his action. Due to the reorganization of the Board of Forestry as ordered in the new Forest Practice Act, it so happened that there was no board of forestry in existence at that time.

Nelson: The outcome was that some personnel shifts were made; and because State Forester Lewis Moran had testified, under oath, in defiance of the director, Mr. Hunter issued discharge papers to Moran. However, secretary of the Resources Agency, Norman B. Livermore, Jr., refused to approve the dismissal. In less than a year Moran was serving as director of the Department of Conservation under a new governor, Edmund G. Brown, Jr.

Odds and Ends

Lake Tahoe

Nelson: Mark Twain referred to Tahoe as the "fairest picture the whole earth affords." When I was a ranger in the Lake Tahoe area in the mid-1920s and supervisor of the Tahoe National Forest in the late 1930s, there was less than three miles of publicly owned shoreline out of seventy-one miles of shoreline on the lake. However, in recent years the Forest Service and the state park departments of California and Nevada have improved that situation through a process of land purchase and land exchange. Now there are approximately 24.6 miles of publicly owned shoreline, and 67 percent of the basin is in public ownership. Since 1966 the Forest Service has increased its basin ownership from 46 percent to 62 percent in 1976.

But this has not solved all of the problems. As a result of more casinos, hotels, subdivisions, condominiums, winter sports, and urban developments, the environmental impact has been serious. Millions of dollars are being spent to export sewage out of the basin to slow down the creeping eutrophication of the lake. Because of serious air pollution, studies are being made to reduce automobile use in the valley. In spite of the Interstate Compact Commission and the Tahoe Regional Planning Agency, many desirable controls have failed, due at least in part to the number of governmental units involved--two states and five counties. It is a very sad situation for one who remembers the Tahoe basin when it was virtually unscarred. One of the great crimes against nature and beauty has been the domination of gambling and gambling interests in the development of that beautiful piece of natural landscape.

In-Lieu Taxes

Nelson: In the early part of our interview we discussed the desire of local governments to secure "in-lieu-of-taxes" payments from the

Nelson: federal government. On March 17, 1976, the House Interior and Insular Affairs Committee reported HR9719 with amendments. This is a revenue-sharing arrangement or payment in-lieu-of-taxes to local government in which "entitlement lands" (national forest, national parks, Bureau of Land Management, and federal water project lands) are located. These would be in addition to other payments and would be based on a formula that provides for a per-acre payment subject to a dollar limitation based on specific laws.

Yield Tax On Timber

Fry: Another thing we talked about was a yield tax on timber. I understand there has been some action on that area.

Nelson: That's right. We did discuss the possibility of a yield tax on timber instead of the regular ad valorem tax. In fact, such a bill (AB1258) has been passed by the legislature and signed into law on May 23, 1976, by Governor Edmund G. Brown, Jr.

Summary

Nelson: It has been fifty-one years since I reported for duty as a timber scaler on the Tahoe National Forest. Forestry and associated resource programs have seen many changes, as has most everything in this fast-moving world. Most of the changes are interrelated, one way or another.

Forestry as we knew it back in the twenties was largely a custodial job--fire protection, efforts to balance livestock numbers with the range-carrying capacities, a relatively small amount of timber sales business, and the beginning of outdoor recreation. Travel and communications were pretty crude.

The 1930s are remembered as the Great Depression period--unemployment, soup lines, "Hoover Villages," and even the Dust Bowl. It was also a period of opportunity for forest and park managing agencies. The emergency employment programs of CCC, WPA, CWA, SERA, etc., made men and equipment available for all kinds of developments--buildings, roads, fire breaks, campgrounds, erosion control, timber stand improvement, insect control, etc. Due to the burdensome taxes, land acquisition by purchase and exchange was stimulated.

Nelson: Then came World War II and the recovery period following it. The demand for all kinds of forest products skyrocketed. The timber brokers had a field day in the redwood region where practically all the land and timber was in private ownership. It was during this period that the Forest Service tried to establish federal regulation over private timber harvesting. Even though it failed, it stimulated action at the state level, and California got its first forest practices act in 1945. This was soon followed by the acquisition of seventy thousand acres of land and timber for state forests in four units. In addition, we initiated the use of controlled burning for range and wildlife habitat improvement, new legislation to facilitate the control of forest insect infestations, and the implementation of the soil-vegetation mapping of wild lands--an essential tool for intelligent land and resource management. Also in the mid-forties the Departments of Youth Authority and Corrections joined with the Division of Forestry in establishing a number of conservation camps.

The fifties and sixties continued to be a period of growth, of urban sprawl, growing pollution of water and air, more demands for recreational opportunities of all kinds--beaches, wilderness, winter sports, water-, forest-, and desert-oriented recreational activities. Every time someone invented a new recreation item, whether it be scuba diving equipment, water skis, or off-the-road vehicles, the land and resource managers were confronted with new demands and new problems. It was during this period that aerial tankers became operational in fire control, and Governor "Pat" Brown authorized doubling the number of conservation camps to serve both human and natural resource rehabilitation purposes.

The 1960s saw a number of social pressures for change. Some of these were evident in the resources field and resulted in the passage of considerable legislation. At the federal level: the Multiple Use-Sustained Yield Act; the Wilderness Act, and the Wild and Scenic Rivers Act; the creation of the Bureau of Outdoor Recreation and the establishment of the Land and Water Conservation Fund; the Clean Water and Clean Air Acts; the passage of the National Environmental Policy Act of 1969; and the creation of the Council on Environmental Quality. At the state level the voters endorsed a bond issue for the purchase and development of park and recreation land and facilities. The legislature tightened the water and air pollution control laws and passed the California Environmental Quality Act of 1970.

It was high time that the nation became aware of the finite nature of our resources and that we recognized the interrelationships and interdependences between the many components of nature. We must also recognize that man is a part of the environmental complex and is dependent upon it. The environmental pendulum is still swinging. Unfortunately, there is a lack of sensitivity to public opinion on the part of some resource people; but there is

Nelson: also a tendency on the part of some preservationists for severe overkill in their drive to accomplish their objectives under a philosophy that the end justifies any means.

The 1970s continue to see change. The Forest Practice Act of 1945 was declared unconstitutional, not because of its inadequacy but because the people who designed the rules had a "pecuniary" interest. In 1972, Proposition 20 (the Coastal Zone Conservation Act) was voted by the people, and now in 1976 the Coastline Commission's recommendations are before the legislature to determine the future of California's thousand-mile coastline.* The June 8, 1976 ballot carries a very controversial initiative statute for the people to indicate whether they are for or against nuclear power plants.**

At the federal level, Congress is considering several bills intended to resolve the issues brought about by recent court interpretations (Izaak Walton League vs. Butz; Zeiske vs. Butz) of the 1897 Organic Administration Act. The outcome of this legislation will determine whether the national forests will be managed scientifically or by congressional prescription frozen in law.

I hope I have not made this oral history too personal; but, after all, it has been a very personal thing. Sadiebelle and I have always been happy that I chose forestry as a profession, and thankful that the wheel of fortune sent us to California with the U.S. Forest Service and the State of California.

I sincerely hope that I have given some idea of what the resource picture was, what it is, and a glimpse at what it might become.

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*Proposition 20 was time-limited, and the legislature failed to enact legislation embodying the Commission's recommendations before the deadline in the summer of 1976. It is expected that similar legislation will be introduced at a later date.

**This initiative was narrowly defeated by the voters; but in the final days before the election, the legislature passed several bills establishing modified controls on future development of nuclear power.

BIBLIOGRAPHICAL REFERENCES

Arvola, T. F. The Regulation of Logging in California. To be published by the California State Department of Conservation in 1976.

Clar, C. Raymond. California Government and Forestry From Spanish Days Until the Creation of the Department of Natural Resources in 1927. California State Department of Natural Resources, Division of Forestry, 1959.

Clar, C. Raymond. California Government and Forestry-II During the Young and Rolph Administrations. California State Department of Conservation, Division of Forestry, 1969.

Clar, C. Raymond. Evolution of California's Wildland Fire Protection System. California State Department of Conservation, Division of Forestry, 1969.

Dana, Samuel Trask and Myron Krueger. California Lands: Ownership, Use and Management. Washington, D. C.: American Forestry Association, 1958.

Forest Situation in California, The. Report to the legislature by the California Forestry Study Committee (the Biggar Committee), 1945.

Forest Situation in California, The. Report to the legislature by the California Forestry Study Committee (the Biggar Committee), Volume II, 1947.

Nelson, DeWitt. Speeches and miscellaneous reference papers, 1944-1976. On file with the Forest History Society, Santa Cruz, California. Indexed by year and subject.

Roosevelt, Nicholas. Conservation: Now or Never. New York: Dodd, Mead and Company, 1970.

Thorpe, Lloyd. Men to Match the Mountains. Seattle: The Met Press, 1972. The story of the California conservation camps.

APPENDICES

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"A SUMMARY OF PANEL DISCUSSION AND OBSERVATIONS OF THE ACT AND RULES FROM ADMINISTRATION'S POINT OF VIEW"

By Panelist DeWitt Nelson
Director, Department of Conservation

As stated by the previous panelist, the Forest Practices Act was passed by the Legislature in 1945. A number of legal requirements had to be met and rules developed for the four Forest Practice Districts. Since that time the law itself has been amended several times. The South Sierra, North Sierra and Redwood District Forest Practice Rules were amended in 1959 and 1960, and Coast Range Pine and Fir District Rules were amended in 1961.

In 1961, under the provisions of the amended law and rules, the Division of Forestry initiated more vigorous enforcement action. The first administrative hearings were held and Timber Operator Permits were revoked. A total of eight operators' permits were suspended and one operator placed on probation. In 1960 there were 1598 active operators, while in 1961 there were 1510 active operators. The slight reduction reflected the market conditions. In 1961 a total of 2,152 valid permits were outstanding. Also that year saw an increase in the number of "repeat inspections" of operations on which rule violations had been previously recorded.

A summary of the 1961 compliance is as follows: Nearly one-half of the infractions observed involved hazard reduction, such as snag falling, slash abatement and firebreaks around slash areas. This is a failure on the part of the operators to provide reasonable "fire insurance" as well as being a rule violation. Other most common non-compliance involved erosion control, fire plan filing and failure to post fire rules. The repeat inspections found about one-half of these infractions corrected. It is much better to prevent them rather than to have to correct them.

LAW ENFORCEMENT - 1961

Notices of punitive action were sent in 1,053 cases. In addition, many personal contacts, repeat inspections and forceful letters were written. One statutory fire law violation was sustained by the court. Two complaints for operating without Timber Operator's Permit, filed in 1960, were sustained by the court in 1961. Eight Timber Operator's Permits were revoked for failure to comply with the rules. One timber operator was placed on probation for three years. Twelve litigation cases were dropped (two corrected; one operator died; and the three-year statute of limitations ran out on nine of them). At the end of 1961, six litigation cases were being prepared. Under the present rules as provided by the Forest Practices Act and under the Administrative Procedures Code an absolute minimum of thirteen weeks is required to complete the prosecution for a violation. In no instance has it been possible to meet this minimum time period. Because of this time lapse it is often too late to take corrective measures with itinerate operators.

TIMBERLAND CONVERSION

In 1961 there were 89 conversion affidavits filed with the State Forester covering 45,801 acres of timberland. Since 1946 there have been 2,279 conversion affidavits filed covering 676,895 acres of timberland. 82% of these cases were for the conversion of timberland for grazing purposes. Under this law, Section 4947, PRC, the State Forester has no prerogative but to accept an affidavit for conversion of

timber land to other uses. The law is mandatory in its language. While there are valid reasons why there should be a law providing for conversion of cover type for different land uses, there is no provision by which the State Forester can require the owner to conform to the provisions of his conversion affidavit. It is my firm belief that many of these affidavits are filed in order to avoid complying with the cutting rules in order to take all of the merchantable timber off the land. This law needs clarification.

ALTERNATE PLANS - 1961

In 1961 the State Board of Forestry, upon the recommendations of the Forest Practice Committees, approved eight alternate plans and one alternate plan amendment. Of this group, four alternate plans and the one amendment were in the Redwood Forest District, two in the North Sierra Forest District, one in the South Sierra Forest District, and one in the Coast Range Pine and Fir Forest District. In addition, two alternate plans were terminated. At the end of 1961 there were fourteen alternate plans in effect.

The Alternate Plans provision of the Forest Practices Law is a very important item since it recognizes that there are a variety of ways by which forest properties can be well managed, and it also recognizes that there is a great difference between timber properties, growing conditions and types of forest products being produced. This provision provides the owner and operator with alternate courses of action in the management of their timber resources. There are many companies who are managing their timber holdings under standards far in excess of the Forest Practices Rule requirements. It would be desirable if more of these management plans were presented to the Forest Practice Committees and the Board of Forestry for review and approval, particularly where there is need for substantial departure from some restrictive rules in order to make timber land fully productive.

PUBLIC OPINION

As stated in the previous paragraph, different forest types require different methods of forest harvesting practices. Even under the best of conditions most cut over lands look "rough" immediately after logging, particularly when compared to the same area prior to cutting. Because of this and there are far too many poor operations, there is a lack of public understanding of what constitutes a good logging operation. As a result much of the public reaction is based on (1) bad operating practices; (2) areas cut over for conversion authorized in Section 4947 PRC; and (3) a lack of understanding of what are good forest practices and what is a good logging operation. Considerable of this adverse publicity is justified, such as failure to take care of erosion, siltation and other stream damage; failure to meet snag falling and slash clean-up responsibilities; and in some instances, failure to leave adequate trees for seed source.

There is contention, in some areas, that the Forest Practices Rules are not doing the job. This point of view is recognized in the above paragraph and in part is the outgrowth of competitive use of the forest lands for other than timber production and the conflicting interests of many people who prefer no logging at all.

On the credit side of the ledger, which the general public and some publicists fail to realize and record, is that the timber industry has come a long way in improved forest practices since the Forest Practices Law was enacted in 1945. Some of the steps that have been taken are: an active program in fire prevention, patrol and suppression. Timber operators are spending

large sums of money in this category today Many operators have spent large sums and have done an excellent job in stream clearance. In the Pine District of the Sierra-Nevadas, the industry has done an excellent job in controlling many insect infestations through salvage logging. Following the tragic timber fires of 1960 one of the biggest and most successful salvage logging operations were undertaken. In several of these areas the private land owners are carrying on intensive reforestation of the burned-over lands. Elsewhere seeding and replanting is being conducted in cut-over and fire-denuded areas. During this same period much progress has been made in better forest management and utilization of the raw material on a strictly voluntary basis. World War II made tremendous demands on the forest, and natural reaction was the development of too much milling capacity, and, as a result, a severe over-harvesting in some areas. This was particularly true in the fir timber of the Coast Range Pine and Fir Forest District.

SUMMARY AND RECOMMENDATIONS

None of these bad and good points can be adequately dealt with in broad generalities. With 1,500 timber operators, and a huge number of timberland owners, there is bound to be a wide spread between the extremes of compliance and non-compliance. The law of averages will probably place the majority on the fair to good side of the center line. Nevertheless, the whole is, and always will be, tainted by those operations on the bad to poor side of the center line.

The Forest Practices Act has been on the books since 1945--17 years--and the Rules have been in effect since 1947--15 years. We went through a long period of education and persuasion in order that all operators, new and old, could have a full chance of understanding the rules and their requirements. No longer can ignorance or misunderstanding be accepted as a reason for violation. The law has been amended several times and each of the District Rules has been amended twice. All have been given wide publicity and, in all instances, the general public has had the opportunity to participate in the hearings at which the rules were developed.

In 1961 the Division of Forestry moved into a more aggressive approach to rule enforcement. The revocation of a number of permits had a salutary effect upon some recalcitrant operators. However, there seem to be two major weaknesses in this enforcement program:

1) The process of bringing a case to a hearing is too long--thirteen weeks as a minimum if there are no hitches. No case has yet been consummated within this minimum time period. To correct this will require some changes in the law and Administrative Code, and increasing the enforcement staff, including the Attorney General's staff. The latter, that is, the enforcement staff, is the most urgent.

2) The penalty, suspension or revocation, may be too severe for some cases and possibly not adequate in other cases.

The law should be amended to provide for a simpler process of procedures and alternative penalties to fit the severity of the case. In many instances revocation of the operator's permit is too severe a penalty. There is need for a "cease and desist" provision in the law in order to stop violations pending corrective action. In addition, the land owner should be made co-responsible with the operator and measures which will require owner compliance should be provided.

The Forest Practices Act estat ishes the policy that the forests shall be harvested to conserve and maintain the productivity of the timberlands. It also sets forth the public interest in the management of the forest, timberlands, watersheds and soil resources of the State.

In only recent years has some attention been given to the soil erosion control problems by requiring waterbreaks in skid trails and roads, and minor attention to preventing the plugging and silting of streams. Primary reliance for stream protection has, in effect, been delegated to the Fish and Game Code through the Department of Fish and Game. This is an area in which public opinion has, is and will continue to make itself felt. This is an area in which the rules have not met the issue. If this problem is not met with reasonable adequacy by the rules and the operations, the time will come when at least part of the Forest Practices Rules will be dictated through the Fish and Game Code. Neither the Board of Forestry nor the industry wants to delegate this responsibility which they now have to any other department or statutory code.

(8/6/62 - Copies to Division Chiefs and to William E. Warne. - M.)

ASSEMBLY COMMITTEE ON NATURAL RESOURCES,
PLANNING, AND PUBLIC WORKS

Subcommittee on Forest Practices and Watershed Management
Assemblyman Charles Warren, Chairman

August 17, 1966
10 a. m.
Mulford Hall
University of California
Berkeley, California

By DeWitt Nelson, Director
Department of Conservation

Mr. Chairman and Members of the Committee:

I am DeWitt Nelson, Director of the Department of Conservation. As one of my last official acts as Director of the Department of Conservation (I am retiring from state service on August 31), I am happy to present a statement on some of the complex problems dealing with California's natural resources.

HISTORICAL:

At the outset, we should recognize the abundance and variety of natural resources with which California has been blessed. Likewise, we must recognize that the people of California have built a rich economy from a virtual wilderness in little more than 100 years. This has been possible because of three major elements:

1) variety of soils and geology reaching from sea level to mountains and to desert;

2) a variety of climate conducive to production and good living; and

3) the pioneering spirit of the people who came here, took advantage of their opportunities and not only built a great state economically, but a state government which is generally envied over the nation.

Of California's 100,000,000 acres of land area only 17,000,000 acres are considered as timber croplands. Of this, approximately 9,000,000 acres are federally owned. The remaining 8,000,000 acres, in private ownership, must be further divided with about half or 4,000,000 acres in large ownerships (5,000 acres or more), while the other 4,000,000 acres are divided among some 30,000 small owners, many of them absentee owners.

During California's pioneering days, resources were exploited to meet the market demands of a population which doubled itself every twenty years. That growth continues but the pattern of exploitation has been greatly modified. What was once largely an agricultural economy is now becoming an industrial economy as well. More demands of every kind are being placed on our resources as a whole.

If we are to maintain the desirable way of life, we must look to all of our resources -- the manner in which they are developed, managed, protected, and preserved. Fundamentally, all wealth comes from the land -- the products that are mined and produced from it. Historically, we have used and developed our resources as though they were limitless -- infinite. But they are not. Productive land, particularly is finite. How each resource is managed in relation to other resources is becoming of paramount importance.

INTERRELATIONSHIPS:

Because of these facts, it is appropriate that your committee and the Legislature take a critical and objective look at the manner in which these land and resource values are being used. We must again examine wherein the public interest and private

interest responsibilities lie and how the private and public interests may be brought into closer harmony where serious conflicts exist. However, may I respectfully urge that all facets of the problem be examined and evaluated for it is easy to be thrown off balance by articulate pressure groups who have simple answers to very complex problems.

Because of our population pressure, we have demands never before visualized, likewise we have competition for resources by industries and citizen groups with opposing points of view. We have many conflicts of philosophy and a lack of understanding of how forests and other resources must be managed to keep them continuously productive. All of these values must be carefully weighed in your examination. This will be no easy task, for in the final analysis we must arrive at an equitable decision which recognizes both the public good and the private need. It will require the blending of the theoretical with the practical.

When California had a much smaller population (we reached the 10,000,000 mark in 1949), we handled relatively simple problems one at a time as they developed. These related to forest use

and management, fire control, water development, recreational use, and all the other considerations which involve people's use of the land. The needs at that time were, in large part, of a local nature.

Now with 19,000,000 people, with every indication the population will continue to increase, it is obvious that their future needs cannot be fulfilled unless those who make the decisions about resource use accept new principles and concepts, new goals to guide them, and new tools to accomplish them.

This is not the first time that these problems have been closely reviewed. Southern California citizens and local governments initiated watershed and fire protection studies as far back as the 1880's. Many studies and much action has taken place since then. Each such study has resulted in better understanding of the problem and resulted in improved programs. In the fire protection field, California has the nation's most difficult problems and the most effective protection organization. There are, however, many areas that require more effective enforcement and implementation.

LEGISLATIVE ACTION:

Every major step that we have taken in the resources field has been the result of an interim committee study. It is my hope that your study may develop equitable and compatible areas of improvement in light of current problems and needs.

Many of our basic resource laws were enacted or improved in 1945 as a result of the 1943-44 California Forestry Study Committee chaired by the Honorable Senator George M. Biggar.

Since that time, many of those laws have been amended and new laws enacted which have improved and strengthened their effectiveness. Those laws have been effective.

We must recognize, however, that since that time our population, with all its demands and pressures, has increased from less than 8,500,000 to more than 19,000,000. These pressures have not only impacted on state budgets, they have been reflected in the demands and pressures for resource commodities, as well as resource amenities. Obviously, this pressure will continue. There are new facts on both sides of the ledger -- those dealing with population pressures and needs, and those dealing with technological advances in resource management and utilization.

Compatibility between many of these issues can be developed if we can secure tolerance and understanding between the contestants. So, you of the Legislature, we of the administrative arm of the state, the resource owners and operators, and the public at large, are confronted with similar problems in light of 1966 demands.

MANAGEMENT PROBLEMS:

Responsible land and resource operators realize the necessity of developing and managing their lands on a long-term basis. Technological developments, resulting in greater commodity yield through better utilization practices, is forcing better resource management to protect huge investments in plants and equipment. There are potential tax problems on the horizon that can endanger even this area of improvement. On the other hand, such measures as the proposed Senate Constitutional Amendment No. 4 (Proposition 3 on the ballot) may possibly alleviate some of the problems, if it should be approved by the people in November.

We must all remember that it takes a long time (60 - 120 years) to grow a crop of trees. During this growing period, there are many risk factors -- fire, insects, disease, wind throw, and taxes. To these may be added market conditions, public withdrawals, etc.

A point I wish to make is that the issues before us are not black or white, good or bad, utilization or preservation. There are many gray areas. Solutions to the problems must recognize the extremes of the spectrum and endeavor to find a workable and equitable area some place near the middle.

The day is here when each interest and each discipline must realize that other interests and other disciplines must be considered. This is true in dealing with highways, forests, recreation, wildlife, aesthetics, water development, watershed protection, water quality control, subdivisions, or "what have you." Therefore, the problems presently confronting landowners, government and the public are many times more complex than ever before.

In the problems under discussion, there are many gray areas, as well as many facts. Also, there are many conflicting interests involved, as well as many ownerships. Each ownership has its own objectives and plans for the use and management of its lands.

OWNERSHIP RESPONSIBILITY:

One of America's traditions is that a landowner can determine the use of his land as long as it does not impinge on others. Most landowners recognize their responsibility. This responsibility is now becoming much broader, for what is now done on a piece of land may affect others many miles away or have serious consequences to resources which are not of the owners particular concern or interest. Ownership responsibility to the general public is being expanded. This adds a new dimension that is being slowly but definitely accepted.

PUBLIC RESPONSIBILITY:

The general public also has a responsibility to the landowner which the public is accepting even more slowly. Here, I refer to vandalism, littering, trespass, carelessness with fire, and liability charges. There are new responsibilities on both sides of the issue which both the owners and the public must recognize with due regard for each other.

Over the years, government's role has been to seek ways and means of assisting and guiding the various interests involved in the management, protection, and use of the privately owned natural resources in such a manner as to bring about the maximum long-range values of those resources to society.

Great strides have been made, particularly in these past twenty years, in bringing into better balance the interrelationships between resources and among those whose interests impinge on one another. Even greater strides must be made in the forthcoming years.

PROGRAMS AND PROGRESS:

In the above presentation, I have reviewed many of the interrelationships to which your letter of transmittal referred. I will now present a few examples of some of the progress that has been made and is being made in these various activities, and briefly present a River Basin Planning Program which, I believe, is essential if we are to solve our total resource program.

California is recognized as a national leader and pioneer in many resources programs.

Having the most critical wildfire problems of any place in the world, this state has developed, over the years, the most effective fire suppression organization, equipment and personnel who work on a close, cooperative basis with local and federal fire control agencies. The state is rapidly strengthening its ability to prevent fires.

Similarly, California has some of the most effective laws and rules governing forest harvesting practices to maintain forest areas in such condition that they will perpetually produce forest products to meet the needs of its people. These regulations are being regularly reviewed and updated to meet the problems of increased public use of resources in the state's forests, including recreation. State Forester Francis H. Raymond will discuss these matters with you in detail.

Another major step forward, in recent years, has been the formation of 162 soil conservation districts covering 70 per cent of the state's area. The state assists these districts in their activities in soil and water conservation programs.

Geologic hazards, such as landslides and earthquake hazards, are getting new attention at the state level as are the potential economic values of geothermal and marine mineral resources.

With this background, I will now address my comments to basic objectives of this committee's review -- that of interrelating man's activities within the watershed. This subject is so complex that it touches every segment of our society, and every resource.

RIVER BASIN STUDIES AND PLANNING:

As the agency with primary responsibility for protecting the state's interest in forest, soil, and geologic resources, the Department of Conservation has always been deeply concerned with this problem. We now have a whole series of on-going programs which deal with segments of the overall problems that have been identified and for which solutions are politically, economically, and technically feasible. However, the Department of Conservation has not had the capability to adequately represent the state's interest in watershed planning and to deal with some of the complex interrelationships that your committee has identified as necessary to meet the social and economic needs of today and tomorrow.

I submit, for your consideration, a program for the 1960's and 1970's that will help assure vitally needed long-range coordinated development of California's forest, soil, and geologic resources and man's activities in the watersheds. A detailed proposal for River Basin Planning is attached.

The department's proposed River Basin Planning Program will -- for the first time -- draw together the component resource responsibilities of this department into unified plans to assure

that the physical, economic, and social needs of California are met. These plans will be integrated with other government levels from the federal level to the local landowner, and the various resource disciplines from the agronomist to the zoologist.

Specifically, this program will analyze current wildland management practices and prepare estimates of needs for fire protection, reforestation, timber harvesting, and brush range improvement. Activities will include analysis of current and project forestry and brush rangeland use as related to the economy, erosion, and water production. Current wildland management programs will be evaluated in terms of current and projected needs. When deficiencies are found, remedial land treatment programs will be designed.

This program, in cooperation with other units, will include the identification of structural measures -- small dams and debris control structures -- necessary for soil and water conservation. Priorities for construction, to best meet the state's needs, will be established.

The impact of current and projected land use on geologic hazards will be identified and programs to avoid conflicts will be developed. Identification of potential mineral resources as they relate to the economy will be developed.

Priority areas have already been identified as the North Coast, including the Eel River, the Lahontan Basin, including Lake Tahoe, and the San Joaquin River Basin.

APPENDIX:

As an appendix to this statement, I am attaching some specific comments in regard to Forest Practices, Research and Experimentation, Soil-Vegetation Survey, Forest Products, Utilization, and Watershed Management.

I am including, in the appendix, some of my recent observations of Foreign Forest Policies and Practices.

State of California
The Resources Agency
Department of Conservation
Division of Forestry

TO: Members of the State Board of Forestry, Deputy State Foresters, Unit Rangers, Resident Forest Managers, Training Centers, Conservation Camp Superintendents

Sacramento

SUBJECT: ADMINISTRATION
History

April 4, 1966

The multilithed reprint of material taken from Southern California Quarterly is being distributed for the casual information of members of this organization.

Without question Dr. Nash used part of his recent doctoral dissertation as the foundation source of his article. Unfortunately, the former work, printed by U. of C. Press as a book titled State Administration and Economic Development, is equally subject to criticism for its far-reaching and questionable historical analysis.

The essence of the critical response to the Nash article can be found in the third paragraph of the "Letter to the Editor."

Incidentally, as quite a separate project, the editor of Forest History requested Clar to review the mentioned Nash book. That review should be forthcoming soon in the quarterly published by the Forest History Society, Inc., (Yale)

R. H. Raymond
State Forester

CASUAL CIRCULAR LETTER: 8-C

"*The California State Board of Forestry 1883-1960*"
by Gerald D. Nash, Ph.D.

and

"*A Letter to the Editor*"
by C.Raymond Clar

from the September 1965
and March 1966 issues of

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The California State Board of Forestry, 1883-1960

BY GERALD D. NASH

One of the most neglected areas within the broad field of forest history concerns the relationship of governments— federal, state, and local—to timber resources. Although much has been written about contemporary problems of forests and their management, little of it has been historical. With a growing interest in this new branch of history, however, in the future there may well be greater emphasis on the evolution of public forest policies. Indeed, no clear-cut picture of American resource management can be obtained unless detailed studies are made of the development of state forestry boards since the Civil War, of their cooperation with federal officials in their respective regions and in Washingington, and of the United States Bureau of Forestry. Great opportunities for research lie in this relatively unexploited subject.

Within this general context of needed investigations the purpose of this paper is modest—to present a brief administrative history of a single state agency, the California State Board of Forestry. As one of the nation's most important forestry commissions, its members faced problems also met by their colleagues in other states. The major issue between 1883 and 1960 revolved over the nature of its functions. Was it to be primarily a research agency to collect and disseminate useful information and to engage in scientific work? Or was it to act as a regulatory body emphasizing the enforcement of fire prevention regulations and timber destruction? The mixture of research and regulatory functions which came to characterize the work of public forestry agencies after 1933 came out of a half-century of struggle and only after a great deal of experimentation. The history of the California State Board of Forestry mirrored a conflict that went on at various levels of government and that constituted one of the outstanding features in the development of American forest policies.

Soon after 1870, many Californians began to fear the exhaustion of their timber resources. Between 1870 and 1900, more than nine billion feet of lumber were cut in the state, and perhaps an equal amount was not reported. By 1872, there were 205 stream and 123 water-power sawmills in California cutting 265 million feet of lumber and 191 million feet of shingles in a single year. With the heavy influx of population into the West, the manufacture of shingles increased more than twentyfold during the next two decades. No wonder, therefore, that C. F. Reed, president of the State Board of Agriculture, lamented with some exaggeration in 1869 that "at least one-third of all our accessible timber is already consumed and destroyed." If the state were to "continue the consumption and destruction at the present rate in the future as in the past, it would require only forty years, therefore, to exhaust our present timber supply." Reed urged the Legislature to regulate this destruction, and also to award bounties for forest cultivation.[1] Meanwhile, merchants and businessmen were concerned with the possible impact which depletion of the forests might have upon California's flourishing tourist industry, and many fruit growers, who depended on box shook for harvesting and transporting their produce, were suddenly aroused. The annual Fruit Growers' Convention, meeting in Los Angeles during 1885, openly asked the Legislature to enact laws to protect existing forests and to encourage the creation of new growth.[2]

Not that state forest regulation was new in California. The very first Legislature in 1850 had decreed a fine of five hundred dollars for any person guilty of starting forest fires. Two years later the penalty was doubled and the courts vested with explicit jurisdiction over the offenders. In 1864, Governor Leland Stanford persuaded the legislators to prohibit trespass on timberlands, although twenty-one counties were exempted. The direct influence of the State Agricultural Society led to a law of 1867 which encouraged tree planting along public roads and highways. When a bill to create a State Forester was passed by the lawmakers in 1871, it failed only because of the pocket veto by the governor.[3]

But ten years of experience with such acts showed clearly that laws to protect forests were not self-enforcing. Many men came to realize that an official to execute regulations was needed.

California State Board of Forestry

Among these was an enthusiastic sportsman, Assemblyman James V. Coleman, who fathered a legislative resolution to provide for the appointment of a committee of inquiry concerning preservation of trees along Lake Tahoe. Governor Stoneman appointed Coleman himself to this commission and two colleagues. In their report of 1885, this board urged the creation of a permanent forestry commission for the entire state to regulate timber cutting, to encourage reforestation, to collect and disseminate useful information, and to demonstrate methods of timber preservation. Accordingly, in the same year the California Legislature established a Board of Forestry composed of three persons appointed by the governor for four-year terms. This agency was to carry out the functions prescribed by the Coleman committee, although the lawmakers gave no clear guidance on whether it was to emphasize its research or its regulatory responsibilities.[4]

The Commissioners began their work by concentrating on research activities. They sought information, through questionnaires, about existing stands of timber, and accurate statistics about past destruction. They also published annual reports and bulletins containing lengthy essays on California trees and shrubbery. The board's staff made the first detailed forestry map of the state to correct misconceptions about the actual supply of lumber. At the same time, the agency publicized existing timber laws by distributing ten thousand cloth copies of fire regulations. With donations of land from private individuals, the commission established six nursery stations where experimental trees were planted to determine varieties that could be introduced in the state successfully. Most of the stock and the seeds distributed at these stations was free of charge, so that private nurserymen became hostile. In general, however, these activities of the board met with approbation.[5]

Nevertheless, some members of the commission wanted it to become a strong regulatory agency. Especially the dominant member, Abbott Kinney, an enthusiastic conservationist and national authority on forests, desired such a shift. As a first step in this program he urged the Legislature to cease its sales of forest lands and instead to create preserves under its own jurisdiction. This request was ignored as the State Land Office sold most of the remaining one million acres of state forest lands to speculators.

In 1887, the board did receive authority to hire assistants for the arrest of persons who started or abetted forest fires. In addition, the board relied on volunteers in thirty-three counties to report frauds and depredations. But the investigators were too few, convictions by local justices of the peace too rare, and fear of government intervention too great, to make this effort a success.[6]

Thus, the weak attempts by the commission to embark upon regulation aroused great hostility. During the depression of 1893, when there were many complaints against "useless boards and commissions," Governor H. H. Markham advocated the abolition of the agency because its research functions could easily be carried out by the state university. Personal political hostility also played a part in this decision, and in March, 1893, the State Board of Forestry came to an untimely end.[7] Nevertheless, the problems which it had confronted continued to persist.

During the ensuing decade, the demand for state protection of lumber resources continued. As in earlier years, farm groups expressed much concern over the rapid destruction of California timber. In January, 1899, representatives of twenty-four agricultural associations organized the California Society for Conserving Waters and Protecting Forests to foster protective policies. In the southern part of the state, a similar organization was founded at the behest of the Southern California Academy of Sciences. A third group, the California Water and Forest Association, was also formed in 1899, and with its five thousand members drew upon the greatest popular support.[8]

The lobbying of the California Water and Forest Association was soon effective. In 1903, the Legislature agreed to appropriate $100,000 for an investigation of the state's water and forest resources. Meanwhile, the Association sponsored a bill written under the auspices of the United States Bureau of Forestry to create another state commission. In 1905, it was approved, and thus California's second Board of Forestry came into being. Although the governor, the secretary of state, and the attorney general were to be members of the new commission, the actual work was to be performed by a State Forester. The broad range of his duties included research as well as regulatory responsibilities. He was to collect data on the state's forests and to prepare educational materials; but he was also charged with the super-

vision of fire wardens paid by the counties or by private individuals.[9]

Between 1905 and 1920, the State Foresters continued the research activities of their predecessors. The three men who held the office, E. T. Allen, G. R. Lull, and G. M. Homans, compiled rudimentary statistics, dispensed fire prevention information, and issued circulars and films. Homans was particularly concerned with the re-establishment of a state nursery, which was authorized in 1917 after many years of effort. Although private nurserymen were still bitterly opposed, the expanding highway program of the state created a great need for trees to beautify the new thoroughfares, parks, and schools.[10]

Increasingly, however, the State Foresters felt that they should emphasize their regulatory functions. Like Kinney before him, Homans was determined to shape the agency's policies in this direction during his long years of tenure (1909-1920). To prevent forest fires, he was forced to rely primarily on volunteer wardens in the counties, for the Legislature appropriated no funds for hiring a full-time staff. This meant that enforcement of fire regulations was a failure, since the volunteers usually arrived on the scene too late, if they arrived at all. Moreover, the fact that fines were to be deposited in the state rather than in county treasuries further vitiated local action. In addition, the lack of funds prevented the transportation of the volunteers, while those who lost their lives on duty left families destitute without any legal claims to compensation.[11]

Homans sought to make the board primarily a regulatory agency by seeking the creation of a professional, centralized fire patrol system. At his behest, a bill to authorize such action was introduced in the California Legislature during the 1913 session. It met stiff opposition, however, since many interested groups feared such a centralization of authority in the State Forester. Not only the officials of the United States Forest Service in California but many organized lumbermen as well preferred volunteer wardens. Certainly, some reasonable arguments could be offered against the extension of detailed restrictions. For six more years, advocates of the two opposing views struggled in the Legislature at every session with neither gaining a clear-cut victory.

Finally, in 1919, both sides agreed to a compromise embodying some of the proposals for which each had striven.[12]

The new Forestry Act of 1919 clearly delimited the research and the regulatory functions of the State Forester. He was to continue his scientific and educational work by collecting statistics and investigating forests and forest preservation. But his regulatory powers were greatly strengthened, as he was authorized to establish a centralized state fire protection system. Where private or local fire patrols existed, the Forester could endow them with the prerogatives of public officers. These now included specific police powers to make arrests, and sufficient funds for the employment of enforcement officers. To guard against undue concentration of authority, administration of state forest laws was to be in the hands not only of the Forester but also of four other persons to represent the interests of the timber, livestock and grain industries, and the public.

In the following decade, state forest policy was characterized by regulation in addition to research. The Board forced California lumbermen to remove their slash whenever it presented a dangerous fire hazard, although sometimes this imposed a serious burden on the private operators. Special appropriations in 1925 and 1926 allowed the Board itself to undertake this expensive task. Meanwhile, the Legislature in 1923 agreed to impose a tax of three cents per acre on private timber lands to foster the work of fire prevention. All timber owners not furnishing their own patrols were held liable, and where state forces participated in extinguishing conflagrations they could require compensation. Many private timber owners in California came to support these policies if they benefited their own properties.[13]

During the Depression decade, the fear of forest depletion continued to foster extension of regulatory controls by the State Board of Forestry. Its prime objectives were the reforestation of cut-over lands, elimination of injurious insects, and most important, reduction of fire losses. The state's rapidly growing population made fire hazards more serious and greatly overburdened local government. With only limited financial resources at its disposal, the state was restricted in its activities and concentrated mainly on reforestation and control of fires. For this purpose, it made use of the large number of unemployed in California by

establishing special labor camps in 1931, where men were provided with food and lodging in return for supervised forest conservation work, reforestation, and fire fighting. More important, perhaps, was the creation of a statewide fighting force which many private timber owners had long demanded to supplement their own efforts. Under the Sanford Plan, adopted in 1931, state government assumed full responsibility for the management and allocation of State Forest Rangers, thus relieving counties of the financial burden of fire extinction on the public lands.[14]

The urgent requirements for lumber in World War II made the issues relating to conservation more pressing than ever. Private interests as well as public officials brought pressure on the Legislature to make a searching re-examination of the state's forest resources and government policies. Thus, in 1943, the lawmakers created an Interim Joint Legislative Committee, the Forestry Study Committee, to develop a more comprehensive and unified program to embrace private companies and state agencies. For more than a year the Committee held hearings to obtain the advice of interested parties, mainly timber owners and stockmen. The former had the greatest influence in shaping the new legislation that was to come out of these discussions.[15]

Under the Forest Practice Act of 1945 and supplementary measures, the Legislature sought to establish a more closely coordinated state forest program, emphasizing regulation and controls rather than research. To provide for greater continuity of policy, the lawmakers staggered the terms of members of the State Board of Forestry. Conscious of the need to prevent irresponsible use of power by forest officials, the act stipulated in some detail the functions of the State Board of Forestry. Its work was to be restricted primarily to the formulation of policies, while the Division of Forestry was entrusted mainly with their execution. The new act also laid down specific rules to govern cooperation in fire fighting between state and local officials, and between state and private land owners, not only in fire fighting, but also in the work of insect control, burning policies, forest surveys, and nursery production. To allay criticisms that the state was interfering with the operations of lumber operators, the act contained an important requirement providing that fire plans prepared by individuals and corporations for their properties could supersede

not raw

state and local regulations, thus leaving a large measure of discretion to private enterprise.[16]

Since 1945, many of California's forest problems have revolved about the implementation of these provisions. Fire prevention and enforcement of preventive legislation have continued to occupy a major share of the State Division of Forestry's attention. A main problem has been to coordinate the efforts of various individuals and agencies interested in this endeavor, especially cooperation between local governments and lumber operators. The effort of California to secure unity has been much complicated by the presence of the federal government's properties, since fifty-two per cent of the state's public forest lands are owned by the national rather than the state government. Thus, the California Legislature has been unable to be master of its own house, since more than half of its forest lands are outside its own jurisdiction. Cooperating with stockmen, the Division of Forestry has also been increasingly concerned with range improvement and the creation of new forest reserves under state control. Finally, much controversy has raged over exemption of newly planted trees from taxation, a measure which state officials have viewed as skeptically as private timbermen have defended it, since it stimulates growth of new forests.[17] As these various issues indicate, the trend towards increased state regulation has been greatly accelerated in the last two decades.

Thus, more than half a century of trial and error helped to shape the duties and responsibilities of the California State Board of Forestry. Although the problem of timber exhaustion was clearly perceived by farmers, sportsmen, and scientists during the nineteenth century, they found it difficult to find adequate means to slow depletion. On the one hand, reforestation and publicity contributed much to the preservation of existing resources. On the other, direct application and enforcement of regulations promised immediate benefits, yet diminished individual initiative by government restrictions. As the Board in California embarked on its task of conservation by research activities, it soon found them to be inadequate in view of the magnitude of destruction. It was only as large-scale consumption and increased fire hazards made lumber exhaustion more imminent that the legislators, in the Forestry Act of 1919, endowed the state com-

mission with strong regulatory as well as research powers. Whether this trend has been beneficial is still, today, a hotly debated issue.

The development of state forestry policies in California was not peculiar to the Pacific Coast, but bore similarities to other states. As yet the detailed history of this movement has not been written. Modern forest conservation policies have their origins in colonial legislation, in nineteenth century European ideas and practices, and in local, state, and federal practices. To trace the evolution of this complex amalgamation presents the historian of forestry with a challenge—and unrivaled opportunities.

NOTES

[1]California, State Agricultural Society, *Transactions, 1866-67* (Sacramento, 1868), p. 497; Theodore H. Hittell, *History of California* (4 vols., San Francisco, 1912), II, 364; C. Raymond Clar, *California Government and Forestry* (Sacramento, 1959), pp. 64-68, 76-86.

[2]Sacramento *Record-Union*, December 15, 16, 1871; California, State Horticultural Commission, *Report, 1885* (Sacramento, 1887), pp. 38, 118-127, for Kinney's address and the Convention's resolution.

[3]*1850 Stats. 425; 1852 Stats. 158; 1863-64 Stats. 136; 1867 Stats. 670.*

[4]*1883 Stats. 391*; Lake Bigler Forestry Commission, *Report, 1884*, in California Legislature, *Appendices to the Journals of the Senate and the Assembly*, 26 Sess. (Sacramento, 1885), V, 5-15; *1885 Stats. 10*; California, State Board of Forestry, *Report, 1885* (Sacramento, 1886), pp. 3-9, 23-52; *Pacific Rural Press*, January 24, 1885.

[5]Abbot Kinney, *Forest Law in America* (New York, 1917), pp. 235- 240; California, State Board of Forestry, *Report, 1905* (Sacramento, 1906), pp. 12-14, 19-25.

[6]California, State Board of Forestry, *Report, 1886* (Sacramento, 1887), p. 7; *ibid., 1887* (Sacramento, 1888), pp. 6-9, 45-51; *ibid., 1889* (Sacramento, 1890), p. 11; *ibid., 1891* (Sacramento, 1892), p. 8; *1887 Stats. 46; Pacific Rural Press*, December 31, 1887.

[7]Governor H. H. Markham, *Biennial Message*, 1893, in California Legislature, *Appendices to the Journals*, 30 Sess. (Sacramento, 1893), I, 11; California, State Board of Forestry, *Report, 1891*, pp. 11-25; Charles H. Shinn, "California and Forestry," *University of California Chronicle*, XXIV (October 1922), 442-449; *ibid.*, XXV (January 1923), 105-113; *ibid.*, XXV (April 1923), 236-243; Clar, *California Government and Forestry*, pp. 147-160.

[8]*The Forester*, V (February 1899), 39; *ibid.*, V (April 1905), 91; San Francisco *Chronicle*, May 14, 15, 1899; *Pacific Rural Press*, March 25, May 13, 1899; Wallace W. Everett, "The Practical in Forestry," *The Forester*, V (December 1899), 275-278.

[9]*1903 Stats. 171*; W. H. Hutchinson, *California Heritage* (San Francisco, 1958), pp. 1-32; San Francisco *Chronicle*, February 24, May 30, 1903; Will Hodge, "The Study of California Forests," *Water and Forest*, IV (May 1904), 3-4; *1905 Stats. 235*; California, State Board of Forestry, *Report, 1905*, pp. 14-16.

[10]E. T. Allen, "Forestry Progress in California," *Water and Forest*, V (January 1906), 9; Pinchot disliked Homans. See Pinchot to Hiram Johnson, Februrary 25, February 27, 1913, in *Hiram Johnson Gubernatorial Papers*, Bancroft Library, University of California, Berkeley; G. B. Lull, "Natural Warfare and Human Welfare," *Bulletin of the California Physical Geography Club*, n.v. (January 1908), 8-11; California, State Board of Forestry, *Report, 1910* (Sacramento, 1911), pp. 84-89, 160; *ibid., 1912* (Sacramento, 1913), pp. 17-71; *ibid., 1914* (Sacramento, 1915), pp. 66-118.

[11]*1917 Stats. 439, 563*; California, State Board of Forestry, *Report, 1914*, p. 46; *ibid., 1916* (Sacramento, 1917), pp. 50-54; *ibid., 1916* (Sacramento, 1919), pp. 45-46; Clar, *California Government and Forestry*, pp. 384-391.

[12]*1919 Stats. 234*; M. B. Pratt, "The California State Service: Its Growth and Objectives," *Journal of Forestry*, XXIX (April 1931), 495-505; Woodbridge Metcalf, "County Organization for Rural Fire Control," California, State Board of Forestry, *Circular #7* (Sacramento, 1923).

[13]S. B. Show, *Timber Growing and Logging Practice in the California Pine Region in United States*, Department of Agriculture, *Bulletin #1402* (Washington, 1926), 1-6, 8-24, 38-54, 71-75; *1923 Stats. 656.*

[14]California, Division of Forestry, *The Sanford Plan* (Sacramento, 1955), *passim;* DeWitt Nelson, "Progressive Forest Management in California," *Journal of Forestry*, L (April 1952), 259-261; ~~Herbert~~ C. Clar, *Brief History of the California Division California* (Sacramento, 1957), pp. 60-235.

[15]Department of Natural Resources, Division of Forestry, *Newsletter*, I-IV (1941-1945), contains information on war-time activities; Forestry Study Committee, *The Forest Situation in California* (2 vols., Sacramento, 1945), I, 9-18, 48-85.

[16]*1945 Cal. Stats. 336, 394, 773, 1461, 1687, 1964, 2118, 2383, 2672*; L. T. Burcham, *California Range Land, An Historico-Ecological Study of the Range Resources of California* (Sacramento, 1957), pp. 60-235.

[17]Samuel T. Dana and Myron Krueger, *California Lands: Ownership, Use and Management* (Washington, 1958), pp. 180-216; California, Senate, Interim Committee on Public Lands, and Assembly Sub-Committee on Forestry, Grazing and Public Lands, and State Board of Forestry, *Hearings* (Sacramento, 1952), Part II, 18-30, 43-90, Part III, 1-30; California, State Board of Forestry, *Minutes*, January 8, March 3, May 26, 1959, and *Annual Forest Practice Report*, 1952-1960.

LETTER TO THE EDITOR

On November 5, 1965, C. Raymond Clar, Assistant Executive Officer, State Board of Forestry, Sacramento, wrote the following letter to the editor which is herewith published without editorial comment. A carbon of Mr. Clar's letter was forwarded to the author of the article involved, Dr. Gerald D. Nash, Associate Professor of History, University of New Mexico, for his reply. Professor Nash's response is published at the conclusion of Mr. Clar's letter.

* * *

Reference is made to the article "The California State Board of Forestry, 1883-1960" in the September 1965 issue of the *Southern California Quarterly*. I wish to present a few general and a few specific criticisms of this writing by Professor Gerald Nash.

With the first reading of the article I decided to remain silent. My reasoning may appear strange, but basically I felt that forty years of intimate association with the subject could have caused me to become lost in a forest of small trees. Then, after discussing the writing with several of my fellow workers and other interested persons I was persuaded to prepare a comment to the editor. This I do herewith, entirely upon my own responsibility. Some errors and half errors should be questioned if only for the sake of the long time record.

By way of general criticism I would like to make a point which would no doubt be affirmed by professional historians who have had an opportunity to extend their education by actual entry into the world of politics and governmental activity. Author Nash gives the impression that he arrives at conclusions from purely academic experience rather than a personal acquaintance with the pushing and pulling of democratic government in day to day action. He seems to imply that those representatives of various industries and of various personal and political interests who constituted the several Boards of Forestry should have determined and mandated some ideal long term policies for the great good of the mass citizenry. Our government simply doesn't work that way. There are too many diverse and complex interests to be compromised into workable policies and procedures. These compromises rarely enjoy universal approval.

I hope I do not do the author an injustice in reading too much into his brief presentation of a broad and intricate subject. And, as a matter of fact, my major complaint may be found in this very brevity, the simplified interpretations the author has made of several very complex program and policy developments.

My first introduction to what is alleged to be an academic weakness of some professional historians was brought to me in reverse fashion by Mr. Newton Drury whom you probably know as the onetime Chief of the National Park Service as well as Chief of the California Division of Beaches and Parks. I met Drury on the street one day after I had spent some two years of research and writing on a manuscript which two years later became the book *California Government and Forestry*. Our personal conversation naturally led to the work which by this time had practically assumed domination over my conscious and subconscious mind.

Mr. Drury said something which probably impressed me because he was adding strength where I was feeling a considerable personal weakness (I am a forester, not an historian). He said, "This is bound to be a valuable contribution, because you have something for which there is no substitute —the hard core experience of top administration."

Now, to some specific points in the article in question (without regard for a few small disturbing matters along the way). On page 295—"Not only the officials of the United States Forest Service in California but many organized lumbermen as well preferred volunteer wardens."

The situation was a little more complicated. Volunteer wardens were not so much preferred as they were necessary under the circumstances. Briefly, it might be said that the lumbermen respected a certain obligation to protect their own property and to recognize the increased fire risk caused by their work (and they still do to a considerable degree). And so believing, they would have preferred to establish and maintain a "fire department" under their own administration. To this system the State Government could eventually be persuaded to contribute grants in aid. However, in California the lumbermen simply lacked the necessary impetus to act in strength.

The U.S. Forest Service preferred to give direct fire protection to private land within and adjacent to the National Forests. For this service they would be reimbursed at a flat annual fee of several cents per acre. It is possible that some misunderstanding could arise regarding the appointment of State firewardens among federal employees. This has long been, and still is a regular practice. There are very few federal forest fire laws and there is no particular need for any. The granting of authority to federal employees to enforce State laws is therefore necessary.

Time has proved that State Forester Homans was right in his basic concept of a strong State fire protection organization. I did not know Homans personally, but a culmination of plans and circumstances gave me the opportunity of playing a part in accomplishing his primary objective 20 years after his death.

In summary, the volunteer warden system was notoriously inadequate, but neither the Legislature, the counties nor the associated lumbermen wished to endorse any program that would obviously be costly. I have heard references to Homan's "cold character." Personally, I have come to suspect that cold cash was the more important deterring element.

Page 296—Nash states that the administration of forest laws was to be in the hands of a Board of Forestry representing several industries as well as the State Forester. The implication of administrative authority residing in the Board has long been a sensitive area. Because the specific question of this authority was taken to the Attorney General several times (and as late as 1940) one probably should not criticize Author Nash for his own forthright interpretation of the law. But historical accuracy demands an understanding that the Board of Forestry possessed only authority of *executive direction* from 1905 to 1927. Thereafter, this authority was modified to become *policy guidance*. At all times a nimble-footed State Forester could and should have been the administrator in fact.

Middle of page 296—Nash wraps up old "Section 19" of the "Menace Law" in two neat sentences which cannot be accepted in their brevity. The Board of Forestry did not force the lumbermen to clean up slash. In fact, the law

was notoriously disregarded. During several winter seasons (and with no dominating reference to the law, I suspect) winter work in slash disposal was found for State Rangers who would otherwise have been laid off. The State emergency fund paid their cost—not in strict accordance with this law or good budgeting practice—and, most strangely, not in accordance with the rigid insistence of the most rigidly non-spending Governor in California's history. My own theory is that the sensible demand for worthwhile winter work for a few dedicated hard-working Rangers was the dominating fact here. And incidentally, the total accomplishment reported, as compared with the total timber slash disposal need, was a mere nothing.

Middle of page 296 again—"Meanwhile, the Legislature in 1923 agreed to impose a tax. . . ." Please, not a *tax*. In 1911 the State Government with the "separation of taxes" constitutional amendment had agreed to forego the assessing of ad valorem property taxes. This forest land law required a "compulsory patrol fee." The law was damned unpopular says one who personally suffered the slings and arrows delivered daily by the postman. Nash says "many private timber owners came to support these policies. . . ." The fact was that a few large owners, in company with government executives, saw this as a way to beat something out of the little owners, many of whom had no interest in the dubious potential saw timber value of some pine trees on their property. The larger and more responsible timber operators quite generally recognized reasonable fire protection costs as a legitimate operating expense.

Page 296, last paragraph—"During the Depression decade, the fear of forest depletion continued to foster extension of regulatory controls by the State Board of Forestry." A most dubious statement in every respect. Lumber production fell off by two-thirds between calendar years 1928 and 1933. Not depressions, but excessive lumber needs during war periods spur the advent of harvesting regulations. There was a certain type of New Deal regulation of marketing under the National Recovery Act involved in another program which did not affect the California Board of Forestry.

The Depression shifted the major source of appropriations to the Federal Government. The California State Treasury had developed a 70 million dollar deficit. Some counties found it near impossible to continue paying their share of the fiscally cooperative fire protection system supervised and operated by the State Forester. This led to several things, namely, (1) a close scrutiny of what the State should be paying for in these cooperative programs (to wit: the Sanford Plan—see article page 297); (2) use of the private and government owned wildland as work areas for unemployed boys and men (State Labor Camps then Civilian Conservation Corps) which meant a tremendous impetus in physical *work accomplished*, not policy change as Nash implies; (3) a huge shifting of the initial cost burden to the Federal Government, with the insistence by the Federal Government that the States continue to maintain the physical improvements.

Top page 297—The Sanford Plan did only what I said above, namely, develop an expenditure plan. Nothing was modified in the slowly increasing trend toward State assumption of wildland fire protection as a matter of policy, but only as increased physical development made this possible.

Professor Nash's reference to the State protecting "public" land could

be very misleading. All that was set forth in the Sanford Plan regarding public land was an acknowledgment that the State of California should furnish and pay for fire protection on the relat ely small amount of wildland owned by the State. The area of reference was almost entirely land dedicated as State Parks.

In the middle of the past paragraph of page 297, Nash gives the impression that the authorities of the Board and the Division of Forestry were segregated and specified in the statutes of 1945. These were to a greater extent merely restated there. The basic legislation in this area was enacted in 1927.

Last sentence of page 297—Company fire plans cannot supersede statutory law or local ordinance. The law simply requires a making and filing of individual operator's fire plans to indicate that they recognize every land manager's basic responsibility, namely, to prevent and abate a public fire nuisance.

It is quite possible that Nash meant to refer to harvesting methods, which the law says shall be in acordance with Rules arising from local sources, or in accordance with Alternate Plans, both of which methods are duly approved by the Board of Forestry. Private enterprise in the aggregate does have a large voice in the methods of timber harvesting which, in effect, are minimum regulations; but precise statutes still specify the mandatory procedures under which the Board of Forestry may withhold approval.

In the next paragraph, page 298, the author refers to the difficulty of obtaining a unified forest policy (?) because "fifty-two percent of the state's public forest lands are owned by the national rather than the state government." This figure matches federal "commercial forest" as compared with all other commercial forest land in the State, and presumably constitutes his source datum. The State actually owns very little commercial forest land, and most of that is automatically beyond the scope of the question because it is dedicated to permanent recreation as State Parks. (The Division of Forestry manages some 64,000 timbered acres in State Forests.)

Nash says the Legislature is unable to be master in its own house under this ownership pattern. Actually, the Legislature has practically no "house" in this sense. In the course of half a century it dissipated a forest empire for a rather dubious monetary income. I refer to the School Land grants and similar grants of the public domain to the State of California. About all the Legislature can now do is regulate private industry; and that whole subject would require a book-length dissertation.

As to the effect of federal ownership of timber land upon Board of Forestry or Legislative policy development, the question of help or hindrance is moot and much too involved to bring up here. It is true that those harvesting regulations imposed upon private operators cutting National Forest timber (that's how it is harvested) by the U.S. Forest Service have often been the subject of complaint by the contracting stumpage purchaser. Such rigidity on behalf of good forest practice by the Federal Government should obviously strengthen any imposed terms for similar stumpage sales by agents of the State when State timber is sold to loggers.

At the middle of page 298, Professor Nash writes of a controversy about

"exempting newly planted trees from taxation." State officials have never "viewed sceptically" this proposition which has been in our State constitution for 40 years. The concept is elementary to good forest practice and this agency labored long and hard to accomplish passage of the law. The only controversy is in the fixing of maturity for property taxation purposes. On the other hand, the subject of forest taxation in general is extremely complex and has been a subject of study and debate for decades if not centuries.

Nash contends that the enforcement of government forest regulations has diminished individual initiative. This we doubt. Certainly the harvesting statistics laugh at such a contention. The truth is that any regulations now imposed are no particular burden for lumbermen who hope to manage a sustained yield operation.

The Division of Forestry has never interpreted its authority to engage in research activities as the modern world of science would interpret that term. Certainly it has never been granted considerable funds for that purpose. Professor Nash indicates in several places that the Board was authorized to engage in research. This may be an unimportant matter of semantics; but the people of this agency would unquestionably deny that the organization had ever been involved in anything approaching intensive research. There have been continuous casual and practical investigations of field methods, and an intense interest in the accomplishments of the experiment stations. To a certain extent the Division has acted as a party to rather intensive investigations by requesting and obtaining ear-marked items of appropriation for allotment to the universities or other research institutions for cooperative projects. But this agency is essentially a busy operating unit of State Government.

I would certainly agree with the statement of Professor Nash that a vast area of historical research yet remains untouched in the field of forestry, government and private.

* * *

Professor Nash, under cover of November 20, 1965, authorized the following comment to be published in reply: "Since Mr. Nash, after careful consideration of Mr. Clar's comments, finds neither factual accuracy nor interpretations in his article subject to any changes, he does not consider it necessary to make a formal reply."

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Interviewer, Regional Oral History Office, 1959--; conducted interview series on University history, woman suffrage, the history of conservation and forestry, public administration and politics. Director, Earl Warren Era Oral History Project, documenting governmental/political history of California 1925-1953; director, Goodwin Knight-Edmund G. Brown Era Project.

Author of articles in professional and popular journals; instructor, summer Oral History Institute, University of Vermont, 1975, 1976, and oral history workshops for Oral History Association and historical agencies; consultant to other oral history projects; oral history editor, Journal of Library History, 1969-1974; secretary, the Oral History Association, 1970-1973.

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